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**BEFORE THE
TENNESSEE REGULATORY AUTHORITY
AT NASHVILLE, TENNESSEE**

**IN RE: UNITED TELEPHONE-SOUTHEAST INC. d/b/a EMBARQ
CORPORATION TARIFF FILING TO INCREASE RATES IN
CONJUNCTION WITH THE APPROVED 2007 ANNUAL PRICE CAP
FILING**

DOCKET NO. 07-00269

**DIRECT TESTIMONY
OF
MICHAEL D. CHRYSLER**

July 1, 2008

PUBLIC VERSION

1 **Q-1 Please state your name for the record.**

2 A-1 My name is Michael D. Chrysler.

3 **Q-2 By whom are you employed and what is your position?**

4 A-2 I am employed by the Consumer Advocate and Protection Division (“CAPD”) in
5 the Office of the Attorney General for the State of Tennessee as a Regulatory
6 Analyst.

7 **Q-3 What is your educational and work related background?**

8 A-3 Please reference attached Appendix A for education and work experience.

9 **Q-4 What is the purpose of your testimony?**

10 A-4 The purpose of my testimony is to cover two topics related to the company’s
11 directory assistance policy. The first will express the continuing need for local
12 directory assistance (“D.A.”) call allotments to serve the public interest. The
13 second topic is a recommendation that the company be required to actively
14 advertise and promote both the existence of and application process for the D.A.
15 call exemptions for those Tennesseans with disabilities and/or age 65 and older
16 and other exemptions the TRA may authorize in this docket.

17

18

I. The Need for Directory Assistance

19 **Q-5 In your opinion, why are D.A. call allowances important for Tennessee**
20 **consumers?**

21 A-5 A telephone is not of much use if a consumer doesn’t have accurate listing
22 information. D.A. is a traditional wire-line service consumers need to locate

1 accurate listing information. The discovery responses indicate both that
2 consumers still use this service and that they seek billing credits for D.A. charges
3 when billing disputes arise with the company. *See* Company Response to
4 Discovery Request # 24 of the CAPD filed April 23, 2008 and Company
5 Response to Discovery Request #35 of the CAPD filed June 17, 2008. Clearly,
6 consumers still make use of this essential service.

7 **Q-6 Do alternatives exist from which Embarq consumers may obtain phone**
8 **numbers for residential and business listings other than through D.A.?**

9 A-6 Yes. Alternatives do exist from which consumers may obtain residential and
10 business listings. The phone book is the obvious and traditional choice. However,
11 phone books can become outdated quickly by turnover in listing in what is other
12 wise called “churn”. Churn occurs when a listing information or telephone
13 number changes. Mr. Buckner will address “churn” with more specificity in his
14 testimony.

15 **Q-7 Do most wireless providers have D.A. service?**

16 A-7 Yes, but they are not free. The prices charged for wireless directory assistance
17 range from \$0.99 to \$1.49, depending on the wireless provider and the terms of
18 service. Additionally, consumers are required to have a long term contract with
19 monthly service fees.

20 **Q-8 Is there a free alternative to traditional D.A. for residential and business**
21 **listings?**

22 A-8 Yes. A service called “1-800-Free-411” is available. However, I have doubts

1 about its accuracy for being able to provide correct listing information. A random
2 sampling reveals that this service could not provide listing information for some
3 listings that are already in Embarq's published directories. In addition, this service
4 is not well known or advertised, most consumers still look to the phone company
5 itself. Currently, its advertisement efforts appear to be restricted to the Internet.

6 **Q-9 Is the Internet a prominent alternative to traditional D.A.?**

7 A-9 Yes. The Internet is what could be termed a "non-traditional" provider of
8 residential and business phone listings. There are various search engines from
9 which a consumer may locate a phone listing. Although accuracy and efficiency
10 is sometimes a concern, the Internet is a viable alternative to finding residential
11 and business listings. However, simply because alternatives such as the Internet
12 exist does not mean that all Tennesseans can forgo traditional telephone services
13 such as directory assistance.

14 **Q-10 Explain why the Internet is not an all inclusive safety net for consumers in**
15 **terms of a reduction in free directory assistance calls in face of increasing**
16 **directory assistance rates.**

17 A-10 While Internet access is practically available wherever dial-tone is available, not
18 every Tennessean truly has access to the Internet. Not everyone has access to
19 alternatives from traditional services like directory assistance. This was noted by
20 former TRA Director Ron Jones regarding another directory assistance matter.
21 While there is increasing penetration for alternatives to technology and
22 technology-driven information, the harsh reality continues to remain that many,

1 many subscribers remain very much dependent on traditional, familiar, and
2 oftentimes life-enabling and enhancing offerings like DA. These subscribers,
3 many of whom are the least fortunate amongst our new and apparently
4 technology-affluent communities, continue to rely on the TRA to ensure the
5 delivery of important services that they have come to expect to receive and should
6 receive.

7 Authority Transcript, September 25, 2006, p. 53.

8 **Q-11 Is there any information or statistics available to support this conclusion?**

9 A-11 Yes. In September 2007, Connected Tennessee, a non-profit dedicated to
10 developing and implementing strategies for technology deployment, including
11 broadband released a report titled "Technology Assessment of Tennessee
12 Residential Consumers". The report is composed of conclusions based
13 exclusively upon surveys conducted in Tennessee and covered various topics,
14 including Internet access and computer ownership. CAPD Exhibit MDC 1. The
15 data reveals that there is a correlation between the level of income of a household
16 and whether the household owns a computer and is a subscriber to an Internet
17 provider. Put simply, the lower one's income is, the less likely they are to own a
18 computer much less have access to the Internet at home.

19 **Q-12 What are some of the specific findings of the surveys conducted by**
20 **Connected Tennessee in terms of the residential access to the Internet as it**
21 **relates to income level state-wide?**

22 A-12 For those households with an income between \$25,000 to \$34,999, computer-

1 ownership stands at 67% and Internet access is 57%. For those households with
2 an income level between 0-\$24,999 state-wide, only 40% percent owned a
3 computer. Of the same income group, only 31% identified themselves as Internet
4 subscribers. *See* pages 104-107 of CAPD Exhibit MDC 1. These particular
5 findings are relevant to the income levels of the predominant counties within
6 Embarq's service area. The median incomes and poverty rates for Carter, Greene,
7 Johnson, Sullivan, Washington, and Unicoi counties indicate that many
8 consumers with a household income of less than \$25,000 are residents within
9 Embarq's service territory. CAPD Exhibit MDC 2.

10 **Q-13 Did the summary information presented by Connected Tennessee reveal any**
11 **other categories or factors that affect computer ownership and residential**
12 **Internet subscriber status?**

13 A-13 There are some distinctions in terms of computer ownership and Internet
14 subscriber status in certain demographics. Whether a person resides in a rural,
15 suburban or urban area is one category. The level of education obtained is listed
16 as a factor as well. *See* pages 85-102 Of CAPD Exhibit MDC 1. Another is race
17 and ethnicity. For example, the survey results show that in terms of owning a
18 computer and being an Internet subscriber, African Americans are below the state-
19 wide average. *See* pages 123-131 of CAPD Exhibit MDC 1.

20 **Q-14 Is there a technology or Internet access "gap" between urban and rural**
21 **counties in Tennessee?**

22 A-14 Yes. Although the gap in terms of Internet use and access between urban and rural

1 counties is closing across the State of Tennessee, there remains a 4% disparity
2 between rural counties and the state-wide average. CAPD Exhibit 3. Most of the
3 counties serviced primarily by Embarq continue to lag behind the state average.
4 Johnson and Unicoi counties are significantly lower than the state-wide average in
5 terms of computer ownership and Internet access. Sullivan, Greene and Carter
6 counties are also lower than the state-wide average. See pages 28 and 32 of CAPD
7 Exhibit MDC 1.

8 **Q-15 Do you have a recommendation as to the call allowance?**

9 A-15 I recommend that the call allotment for Embarq remain at three free calls at a
10 minimum. If the call allowance for D.A. is lowered, it is the households not so
11 abundantly blessed that would have few if any alternatives to traditional directory
12 assistance service. The central problem is that alternatives such as the Internet
13 require computer ownership and subscriber status, which is sometimes out of
14 reach for those households with more immediate priorities. In addition, wireless
15 D.A. is not free, it requires a long term contract with monthly service fees. A call
16 allowance of at least three calls is an appropriate safe-guard for consumers at a
17 time when rates for service continue to go up under price cap regulation.

18 **Q-16 Would you welcome an additional directory assistance exemption for Life-**
19 **line consumers?**

20 A-16 Yes, however a Life-line exemption would only cover a small percentage of those
21 consumers without D.A. alternatives. According to the most recent TRA Annual
22 Report, as of June 2006, there were less than 50,000 Life-line subscribers in the

1 entire state. According to the Consumer Services Division of the TRA, 5,081 of
2 Embarq's customers were Life-line consumers as of June 2007. However, giving
3 Life-line consumers an exemption for unlimited calls while reducing the call
4 allowance for all consumers would not remedy the disparity between those of
5 lower income levels that do not have ready access to the Internet and a computer.
6 Given the Federal Poverty Guidelines that determine whether a consumer
7 qualifies for Life-line or not, many consumers that do not own computers and
8 have access to the Internet would not qualify for Life-line and would remain
9 reliant on a call allowance to locate unpublished phone numbers. In my opinion,
10 to protect the greatest number of consumers, the call allowance should remain at
11 three or possibly more. If the Authority were to determine a Life-line exemption
12 would serve the public interest, this would result in additional free call
13 allowances.

14 **II. The Need to Actively Promote and Advertise the Existence of the Directory Assistance** 15 **Exemptions**

16 **Q-17 How long has the TRA required Embarq to provide an exemption for**
17 **charges for local directory assistance for those with disabilities and those age**
18 **65 and older?**

19 A-17 Since 1997 when the company was first allowed to charge rates for directory
20 assistance.

21 **Q-18 (Confidential.)**

22 A-18 **(Confidential.)**

1 **Q-19 (Confidential.)**

2 **A-19 (Confidential.)**

3 **Q-20 If the exemptions for free directory assistance calls are available to**
4 **consumers with disabilities or those age 65 and over, why do you believe**
5 **consumers are not availing themselves of the exemptions?**

6 A-20 In my opinion, the company has not done enough to inform consumers of the
7 existence of the exemptions. While the existence of the exemptions and
8 application process is described in the company's tariffs, a tariff book posted
9 online or on-file with the TRA is not a practical method to providing the greatest
10 exposure disclosing the existence of a public benefit to consumers. A better
11 method of informing consumers is a description of the exemptions and application
12 process in the general information pages of the phone books distributed by
13 Embarq and informing consumers at the time they sign up for service. On such
14 pages consumers can find information concerning such important items as the
15 Tennessee Relay Center, contact information for the TRA and a description of
16 Life-line. I have examined Embarq's phone books and have found that they do
17 not disclose the existence of exemptions from directory assistance charges for
18 those with disabilities or age 65 and older. In fact, in terms of directory
19 assistance, the company phone books say only this:

20 Telephone numbers for anywhere in the United States can be
21 obtained by dialing 1+411. A maximum of two numbers may be
22 requested on each call. This includes numbers within your area
23 code, outside your area code and toll free numbers. Appropriate
24 charges will apply to each of these calls.

1 See CAPD Exhibit MDC 5. Some phone books for smaller communities, such as
2 the directory for Mountain City, do not even mention D.A. in the general
3 information pages. Clearly, consumers cannot learn of the existence of the
4 exemptions or that a free call allowance for local directory assistance for all
5 consumers exists by looking at the phone book.

6 **Q-21 Are there other methods of providing notice to consumers about directory**
7 **assistance exemptions and free call allowances?**

8 A-21 Yes. Quarterly billing inserts are another generally accepted method of relaying
9 important information to consumers. Also, include information in a welcome
10 packet with the first bill.

11 **Q-22 What examples of billing inserts has the company provided to consumers**
12 **informing them of the existence of the exemptions for those with disabilities**
13 **or age 65 and older?**

14 A-22 On April 2, 2008, the Consumer Advocate and Protection Division filed
15 discovery requests in this docket. Discovery Request # 30 requested copies and
16 examples of all billing inserts or other forms of public notice published or
17 distributed by the company for the past five years that disclose the existence of the
18 exemptions to consumers. After The company provided a copy of one billing
19 insert with an effective date of May 1, 2008 that disclosed the existence of the
20 exemptions and the number of calls under the general call allowance. *See*
21 Company Response to Discovery Request #30, dated June 17, 2008. I can only
22 conclude from the discovery response that only one billing insert has been

1 provided to consumers in the last five years regarding the exemptions and that this
2 billing insert was only distributed recently.

3 **Q-23 To your knowledge, does Embark's website disclose the existence of the**
4 **exemptions?**

5 A-23 No. I have looked over Embark's webpage at www.embark.com. As of this date I
6 can not locate any information posted regarding the exemptions, the application
7 process for exemptions or the general call allowance. Life-line applications for
8 Tennessee residents are posted on the company website.

9 **Q-24 Do you have a recommendation on this issue?**

10 A-24 Yes. I recommend that the company be required to work with the TRA and CAPD
11 staff to develop effective means to publicize this important public benefit.
12 Exemptions for the disabled, those with Life-line benefits and those age 65 and
13 older cannot serve the public interest if the public isn't aware of them.

14 **Q-25 Does this conclude your testimony?**

15 A-25 Yes.

#120999

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AFFIDAVIT

I, Michael D. Chrysler, Regulatory Analyst, for the Consumer Advocate Division of
the Attorney General's Office, hereby certify that the attached Direct Testimony represents
my opinion in the above-referenced case and the opinion of the Consumer Advocate
Division.

Sworn to and subscribed before me
this 15th day of July, 2008.

Emily Knight
NOTARY PUBLIC



My Commission Expires AUG. 23, 2011

Michael D. Chrysler
MICHAEL D. CHRYSLER

My commission expires: Aug. 23, 2011

Before the

TENNESSEE REGULATORY AUTHORITY

**IN RE: UNITED TELEPHONE-SOUTHEAST INC. d/b/a EMBARQ CORPORATION
TARIFF FILING TO INCREASE RATES IN CONJUNCTION WITH THE APPROVED
2007 ANNUAL PRICE CAP FILING**

DOCKET NO. 07-00269

APPENDIX A

July 1, 2008

**MICHAEL CHRYSLER:
EXPERT WITNESS QUALIFICATIONS & PRIOR TESTIMONY AND
PUBLICATIONS**

Regulatory Analyst

Education:

Bachelor of Business Administration (Accounting)
Ft. Lauderdale University, 1970

TN AG (Consumer Advocate & Protection Division)

1998-Present

Provided analysis in Energy and Water issues, rate cases as assigned
Active in analysis related to Consumer Protection telephone issues
Testified in Docket No. 02-00383 Petition of Chattanooga Gas Company For Approval of Change in Purchased Gas Adjustment
Testified in Docket No. 03-00118 Petition of Tennessee-American Water Company To Change And Increase Certain Rates and Charges
Testified In Docket No. 03-00313 Application of Nashville Gas Company, a Division of Piedmont Natural Gas Company, Inc. for an Adjustment of its Rates and Charges, the Approval of Revised Tariffs and the Approval of Revised Service Regulations
Testified in Docket No. 04-0034 Petition of Chattanooga Gas Company for Approval of Adjustment of its Rates and Charges and Revised Tariff
Testified in Docket No. 04-00288 Petition of Tennessee American Water Company to Change and Increase Certain Rates and Charges So as to Permit it to Earn a Fair and Adequate Rate of Return on its Property Used and Useful in Furnishing Water Service to its Customers.
Testified in Docket No. 05-00258 Petition of the Consumer Advocate to Open an Investigation to Determine Whether Atmos Energy Corp. Should Be Required by the Tennessee Regulatory Authority to Appear and Show Cause That Atmos Energy Corp. Is Not Overearning in Violation of Tennessee Law and That it Is Charging Rates That Are Just and Reasonable
Testified in Docket No. 06-00175 Petition of Chattanooga Gas Company to Increase Rates, Including a Comprehensive Rate Design Proposal and Revised Tariff
Testified in Docket No. 06-00290 Petition of Tennessee American Water Company to Change and Increase Certain Rates and Charges So as to Permit it to Earn a Fair and Adequate Rate of Return on its Property Used and Useful in Furnishing Water Service to its Customers
Testified in Docket No. 07-00105 Petition of Atmos Energy Corporation For Approval of a General Rate Increase
- Internet Links to Testimony provided on following pages

NRRI Research Advisory Committee (Natural Gas Issues)

Present

Chairman of NASUCA's Consumer Protection Committee

2004-Present

NASUCA Committee Resolutions contributed to by Mike Chrysler (copies attached):

- *Energy Conservation and Decoupling Resolution* - sponsored
- *High Winter Energy Costs Resolution* regarding LIHEAP funding - sponsored
- *Uncollectible Accounts Resolution* regarding for State Authority's to resist expansion of definition - sponsored

120302/Chrysler-Direct/07-00269

- *Minimum Service Quality Standards Resolution* calling for regular reporting and industry standards - sponsored
- *Infrastructure Surcharge Resolution* calling for annual tracking adjustments - contributor

Northern Indiana Public Service Company (NISOURCE)

1973-1997

Principal of Electric Business Planning: Electric Business Planning Department (1990-1997)
Coordinated \$147 million Capital, \$101 million Expense, and \$789 million Margin budget development of The Electric Business, with subsequent monthly/quarterly explanation of variances reported to Senior Management.

- Provided consulting assistance to station/district planners for proper explanation of their Capital & Expense variances to Senior Management, then summarized for reporting.
- Assisted with O&M and Capital Budget ABM training (budget development and data entry in budgeting system); plus proper development of budgets for presentation and approval.
- Provided Electric Margin variance analysis by class on a monthly/quarterly basis to Senior Management.
- Developed a sophisticated computer model for the Director of Electric Production in Microsoft Excel, providing “what if” analysis along with historical data to reach a goal of \$16 per megawatt hour generation cost goal.
- Assisted the Vice President and General Manager, Electric Business in the development of written speeches as well as corresponding presentation slides.

Senior Consultant: Corporate Consulting Services (1989-1990)

Responsible for providing expertise and assistance to various departments within the company, including training of management personnel on various productivity seminars and software programs.

- Researched “under-billing” of NIPSCO gas customers due to the variable of “Supercompressibility.” Quantified over \$200,000 of annual under-billing for the gas metering department.
- Interviewed NIPSCO management personnel to ensure compliance with “Automatic Time Reporting” program for Human Resources Department.

Senior Strategic Planning Analyst: Corporate Strategic Planning Department (1985-1989)

Responsible for providing top-down, bottom-up communication of the Corporate Strategic Plan to all management levels.

- Assisted in the development, coordination of data and reporting of meaningful performance measures to Senior Management for each business unit.
- Assisted management employees with the training classes “Business Strategies” and “Operations Strategies.” This assistance included ensuring appropriate workbase study, drafting of the company strategic plan, involvement and understanding of principles and strategies in making business decisions to be entered in case studies and computer simulations.

Senior Rate Analyst: Rate and Contract Department (1978-1985)

Responsible for supporting rate case development, and associated work papers and supporting materials for Case-In-Chief. Provided tracking updates, reflecting modification to rate filings until subsequent

filing.

- Prepared filing and exhibits for purchase gas adjustment, fuel cost adjustment, purchase power tracking adjustments with the Indiana PSC/IURC
- Audited large gas and electric industrial bills prior to release on a monthly basis
- Billed large industrial gas and electric customers during union contract negotiations (approximately 60% of company revenue). Customers included U.S. Steel, Inland and Bethlehem Steel.
- Assisted in the preparation of testimony and exhibits for regulatory hearings.

Junior Accountant: Customer Accounting Department (1973-1978)

Responsible for communicating corporate billing and office procedures to district commercial offices. Provided special data analysis regarding billing to corporate accounting.

- Provided vacation relief for district office managers. These responsibilities included supervision of meter readers, application credit, billing and cash representatives.
- Calculated source reports and reported to Accounting Department including gas cost, fuel cost, purchase power adjustment and other revenue amounts on a monthly basis.

Internet Links to Expert Testimony of Michael D. Chrysler on behalf of CAPD

TRA Docket 07-00105

IN RE: PETITION OF ATMOS ENERGY CORPORATION FOR APPROVAL OF A GENERAL RATE INCREASE

Direct Testimony Filed 8/22/07: <http://www2.state.tn.us/tra/dockets/0700105.htm>

TRA Docket 06-00290

IN RE: PETITION OF TENNESSEE AMERICAN WATER COMPANY TO CHANGE AND INCREASE CERTAIN RATES AND CHARGES SO AS TO PERMIT IT TO EARN A FAIR AND ADEQUATE RATE OF RETURN ON ITS PROPERTY USED AND USEFUL IN FURNISHING WATER SERVICE TO ITS CUSTOMERS

Direct Testimony Filed 3/5/07: <http://www.state.tn.us/tra/orders/2006/0600290ca.pdf>

TRA Docket No. 05-00258

IN RE: PETITION TO OPEN AN INVESTIGATION TO DETERMINE WHETHER ATMOS ENERGY CORPORATION SHOULD BE REQUIRED BY THE TRA TO APPEAR AND SHOW CAUSE THAT ATMOS ENERGY CORPORATION IS NOT OVEREARNING IN VIOLATION OF TENNESSEE LAW AND THAT IT IS CHARGING RATES THAT ARE JUST AND REASONABLE

Direct Testimony filed 7/17/06: <http://www.state.tn.us/tra/orders/2005/05258by.pdf>

TRA Docket 04-00034

IN RE: PETITION OF CHATTANOOGA GAS COMPANY FOR APPROVAL OF ADJUSTMENT OF ITS RATES AND CHARGES AND REVISED TARIFF.

Direct Testimony filed 7/26/04: <http://www.state.tn.us/tra/orders/2004/0400034dn.pdf>

TRA Docket 04-00288

120302/Chrysler-Direct/07-00269

IN RE: PETITION OF TENNESSEE AMERICAN WATER COMPANY TO CHANGE AND INCREASE CERTAIN RATES AND CHARGES SO AS TO PERMIT IT TO EARN A FAIR AND ADEQUATE RATE OF RETURN ON ITS PROPERTY USED AND USEFUL IN FURNISHING WATER SERVICE TO ITS CUSTOMERS.

Direct Testimony filed 12/3/04: <http://www.state.tn.us/tra/orders/2004/0400288bl.pdf>

TRA Docket 03-00313

IN RE: APPLICATION OF NASHVILLE GAS COMPANY, A DIVISION OF PIEDMONT NATURAL GAS COMPANY, INC. FOR AN ADJUSTMENT OF ITS RATES AND CHARGES, FOR APPROVAL OF REVISED TARIFFS AND APPROVAL OF REVISED SERVICE REGULATIONS.

Direct Testimony filed 8/18/03: <http://www.state.tn.us/tra/orders/2003/0300313x.pdf>

TRA Docket 03-00118

IN RE: PETITION OF TENNESSEE AMERICAN WATER COMPANY TO CHANGE AND INCREASE CERTAIN RATES AND CHARGES SO AS TO PERMIT IT TO EARN A FAIR AND ADEQUATE RATE OF RETURN ON ITS PROPERTY USED AND USEFUL IN FURNISHING WATER SERVICE TO ITS CUSTOMERS.

Direct Testimony filed 5/30/03: <http://www.state.tn.us/tra/orders/2003/0300118bo.pdf>

TRA Docket 02-00383

IN RE: PETITION OF CHATTANOOGA GAS COMPANY FOR APPROVAL OF CHANGE IN PURCHASE GAS ADJUSTMENT

Direct Testimony filed 5/21/03: <http://www.state.tn.us/tra/orders/2002/0200383m.pdf>

**THE NATIONAL ASSOCIATION OF
STATE UTILITY CONSUMER ADVOCATES
RESOLUTION 2007-01**

NASUCA ENERGY CONSERVATION AND DECOUPLING RESOLUTION

Whereas, the provision and promotion of energy efficiency measures are increasingly viewed by state commissions as a necessary component of utility service;

Whereas, many states are now encouraging rate-regulated utilities to adopt energy efficiency programs and other demand-side measures to decrease the number of units of energy each utility's customers purchase from the utility;

Whereas NASUCA has long supported the adoption of effective energy efficiency programs;

Whereas recent proposals by rate-regulated public utilities for the initiation or expansion of energy efficiency measures have featured utility rate incentives or revenue "decoupling" mechanisms that guarantee utilities a predetermined amount of revenues regardless of the number of units of energy sold;

Whereas, the utilities proposing decoupling measures seek guarantees from public utilities commissions that they will receive their allowed level of revenues;

Whereas, these utilities justify this departure from traditional rate-making principles on the theory they are being asked to help their customers purchase fewer energy units from them by promoting energy efficiency measures and other demand-side measures, thereby reducing their revenues and, consequently, their returns to their shareholders, and that decoupling mechanisms compensate utilities for revenues lost due to conservation;

Whereas, these utilities contend that because these measures reduce their revenues, they have a disincentive to encourage programs that aid their customers in purchasing fewer units of energy;

Whereas, historically, rates have been set in periodic rate cases by matching test-year revenues with test-year expenses, adding pro forma adjustments and allowing the utilities an opportunity to earn a reasonable rate of return on their investments in exchange for a state-protected monopoly;

Whereas revenue guarantee mechanisms allow rate adjustments to occur based upon one element that affects a utility's revenue requirement, without supervision or review of other factors that may offset the need for such a rate change;

Whereas, historically, rate-regulated utilities were not guaranteed they would earn the allowed return; rather, earnings depended on capable management operating the utilities in an efficient manner;

Whereas, many utilities proposing revenue decoupling request compensation for revenue lost per customer, implying that sales volumes are declining, when in fact these utilities' total energy sales revenues are stable or increasing;

Whereas, there are a number of factors that may cause a utility to sell fewer units of energy over a period of time, including weather, changing economic conditions, shifts in population, loss of large customers and switches to other types of energy, as well as energy efficiency and other demand-side measures;

Whereas many utilities have been offering cost-effective energy efficiency programs and actively marketing these programs for years without proposing or implementing rate incentives or revenue guarantee mechanisms such as decoupling, and have continued to enjoy financial health;

Whereas past experience has shown that revenue guarantee mechanisms such as decoupling may result in significant rate increases to customers;

Whereas some utilities have referenced the benefit of encouraging energy efficiency programs as a justification for revenue guarantee mechanisms without in fact offering any energy efficiency programs, indicating that the revenue guarantee mechanisms are attractive to utilities for reasons other than their interest in promoting energy conservation;

Whereas past experience has shown that rate increases prompted by revenue guarantee mechanisms such as decoupling are often driven not so much by reduced consumption caused by utility energy efficiency programs, as by reduced consumption due to normal business risks such as changes in weather, price sensitivity, or changes in the state of the economy;

Whereas utilities are better situated than are consumers or state regulators to anticipate, plan for, and respond to changes in revenue prompted by normal business risks, and the shifting of normal business risks away from utilities insulates them from business changes and reduces their incentive to operate efficiently and effectively;

Whereas the traditional ratemaking process has historically compensated utilities for experiencing revenue variations associated with normal business risks;

NOW THEREFORE NASUCA RESOLVES:

To continue its long tradition of support for the adoption of effective energy efficiency programs;

And to oppose decoupling mechanisms that would guarantee utilities the recovery of a predetermined level of revenue without regard to the number of energy units sold and the cause of lost revenue between rate cases;

BE IT FURTHER RESOLVED:

NASUCA urges Public Utilities Commissions to disallow revenue true-ups between rate cases that violate the matching principle, the prohibition against retroactive ratemaking, the prohibition against single-issue ratemaking, or that diminish the incentives to control costs that would otherwise apply between rate cases;

NASUCA urges State legislatures and Public Utilities Commissions to, prior to using decoupling as a means to blunt utility opposition to energy efficiency and other demand-side measures, (1) consider alternative measures that more efficiently promote energy efficiency and other demand side measures; (2) evaluate whether a utility proposing the adoption of a revenue decoupling mechanism has demonstrated a commitment to energy efficiency programs in the recent past; and (3) examine whether a utility proposing the adoption of a revenue decoupling mechanism has a history of prudently and reasonably utilizing alternative ratemaking tools;

If decoupling is allowed by any state commission, NASUCA recommends that the mechanism be structured to (1) prevent over-earning and provide a significant downward adjustment to the utilities' ROE in recognition of the significant reduction in risk associated with the use of a decoupling mechanism, (2) ensure the utility engages in incremental conservation efforts, such as including conservation targets and reduced or withheld recovery should the utility fail to meet those targets, and (3) require utilities to demonstrate that the reduced usage reflected in monthly revenue decoupling adjustments are specifically linked to the utility's promotion of energy efficiency programs.

NASUCA authorizes its Standing Committees to develop specific positions and to take appropriate actions consistent with the terms of this resolution to secure its implementation, with the approval of the Executive Committee of NASUCA. The Standing Committees or the Executive Committee shall notify the membership of any action taken pursuant to this resolution.

Approved by NASUCA:

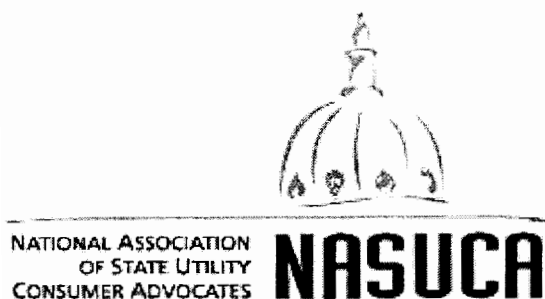
Submitted by:

Denver, Colorado

NASUCA Consumer Protection Committee

June 12, 2007

June 11, 2007



**The National Association of State Utility Consumer Advocates
Resolution 2005-03**

INFRASTRUCTURE SURCHARGE RESOLUTION

Calling upon state regulatory authorities and legislatures to refuse to allow, or to consider revoking, annual tracking adjustments to rates resulting from additional non-traditional gas, water, sewer or electric infrastructure replacement programs;

Whereas, traditional ratemaking methodologies have allowed investor shareholders to earn a return on new and upgraded mains and electric plant through general rate case reviews allowing the ratepayers being charged for the prudent and necessary system upgrades to be represented in traditional contested rate proceedings in which all items of expense and capital investments are considered; and

Whereas, depreciation provides a "funding" mechanism for natural gas, water, sewer, and electric plant replacement because it reduces net operating income and increases the revenue required from rate payers for an acceptable rate of return during the formal rate proceeding; and

Whereas, traditional ratemaking processes have withstood the test of time, so that all parties represented have an opportunity to have their interests fairly represented; and

Whereas, parties representing the interests of shareholders and company managements may propose "short-circuit" methods focused on single categories of increased expense, in order to "speed up" the recovery of costs outside the normal regulatory process, and to provide regulators ways to avoid the rate review process; and

Whereas, utilities in several states have proposed, either in rate cases or as state legislation, various "tracking methodologies" which, if allowed, would enable them to increase rates through non-traditional ratemaking processes sometimes called DSIC (Distribution System Improvement Charge), DSR (Distribution System Replacement), AMRP (Accelerated Main Replacement Program) PRP (Pipeline Replacement Program) which would allow immediate rate recovery of capital investment for new projects on a year-by-year basis in order to replace certain rate base infrastructure through a surcharge; and

Whereas, if such tracking methodologies were allowed, regulatory authorities may not be able to review such capital investments for prudence, and may not be able to review possible offsetting contemporaneous cost reductions or revenue increases from other utility activities; and

Whereas, if such tracking methodologies are allowed ratepayers will become involuntary investors paying for unreviewed investments that will increase rates;

Whereas, at a time of rising commodity costs, regulators need to understand the potential significant new burden upon consumers caused by a tracking surcharge for plant additions;

THEREFORE BE IT RESOLVED, that NASUCA calls upon state regulatory authorities and legislators to refuse to impose on consumers, or to consider revoking, non-traditional infrastructure surcharges that would increase natural gas, water, sewer or electric utility bills without traditional opportunity for consideration of countervailing cost decreases and revenue increases, and review by all parties including appropriate consumer advocacy offices prior to implementation and to remain committed to traditional ratemaking principles fairly representing the interests of both consumers and stockholders.

BE IT FURTHER RESOLVED, that NASUCA authorizes its Standing Committees to develop specific positions and to take appropriate actions consistent with the terms of this resolution to secure its implementation, with the approval of the Executive Committee of NASUCA. The Standing Committees or the Executive Committee shall notify the membership of any action taken pursuant to this resolution.

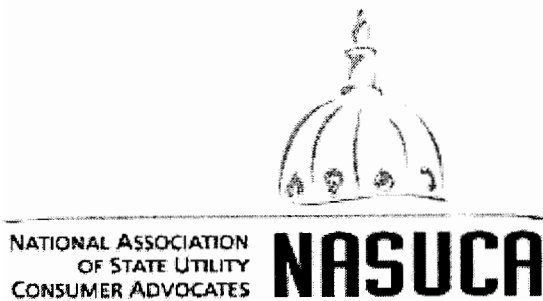
Submitted by:

Michael D. Chrysler, Chair, Consumer Protection Committee
June 12, 2005

Approved by NASUCA

Place: New Orleans, LA
Date: June 14, 2005

91974



**The National Association of State Utility Consumer Advocates
Resolution 2005-04**

MINIMUM SERVICE QUALITY STANDARDS RESOLUTION

Calling upon state regulatory authorities to establish regular reporting requirements for utilities on service quality and to establish minimum performance standards with appropriate enforcement provisions so that adequate, reliable, and safe service is achieved and maintained; and

Whereas, adequate service quality from providers of gas, electric, water, and telecommunications services is essential to everyday life and affects almost every function of our society, and service inadequacies and interruptions frustrate or disrupt normal functions; and

Whereas, adequate service quality from such providers is also vital to our Nation's economy, our position in the global economy and to national security;

Whereas, gas, electric, water, and telecommunications service providers have a duty to provide service that is adequate, reliable, and safe; and

Whereas, consumers expect and should receive service that is consistently adequate, reliable, and safe; and

Whereas, utility industry developments over the past decade such as mergers, diversification, and changing economic conditions have encouraged utilities to cut costs, reduce staffs and outsource some utility operating functions, and such efforts to economize may have led to deterioration of service quality; and

Whereas, a gradual decline in performance may not be detected for some time if regulators do not keep informed as to service quality through regular monitoring; and

Whereas, by keeping informed, regulators are better able to recognize signs of deterioration and inadequacies so that they can take corrective action to avert major service quality problems that would otherwise be frustrating and disruptive to consumers; and

Whereas, standardized reporting requirements and regular reporting are necessary for regulators to be able to monitor service quality and changes in performance; and

Whereas, reports should address performance areas such as customer relations and billing (e.g., responsiveness of customer call centers, responsiveness to consumer complaints, timeliness of installations and repairs, and accuracy and frequency of billing and meter reading) and operating performance (e.g., frequency and duration of outages, and responsiveness to safety calls); and

Whereas, reporting requirements should be carefully designed to yield accurate data that is uniform and consistent; and

Whereas, in addition to keeping informed about service quality, regulators should establish measurable performance standards that must be met for providers to achieve and maintain a minimum quality of service, to the extent that quality of service is measurable, so that expectations are clear and problems are minimized; and

Whereas, performance standards should be supported by appropriate enforcement provisions; and

Whereas, service quality data and information should be available to the public to encourage companies to achieve good performance results, to assure that regulation is open and effective and to assist consumers who must choose among competitive providers;

THEREFORE BE IT RESOLVED, that NASUCA calls upon state regulatory authorities to establish regular service quality reporting requirements applicable to gas, electric, water, and telecommunications service providers, and to establish minimum performance standards with appropriate enforcement provisions to monitor and promote improvement toward a consistently high level of service quality for their gas, electric, water, and telecommunications customers.

BE IT FURTHER RESOLVED, that NASUCA authorizes its Standing Committees to develop specific positions and to take appropriate actions consistent with the terms of this resolution to secure its implementation, with the approval of the Executive Committee of NASUCA. The Standing Committees or the Executive Committee shall notify the membership of any action taken pursuant to this resolution.

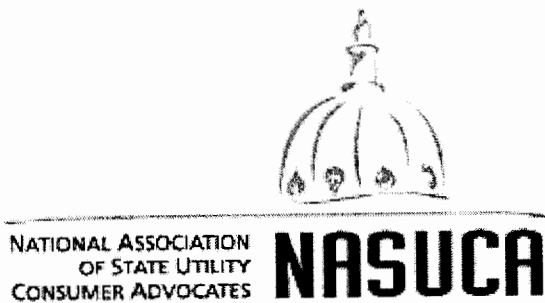
Submitted by:

Michael D. Chrysler, Chair, Consumer Protection Committee
June 12, 2005

Approved by NASUCA:
Place: New Orleans, LA
Date: June 14, 2005

91972

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RESOLUTION

Calling Upon State Regulatory Authorities to resist the efforts of Local Gas Distribution Companies to expand the interpretation of gas cost to include a calculated portion of their uncollectible accounts expense or other non-gas costs in purchased gas cost recovery mechanisms.

Whereas, many natural gas Local Distribution Companies (LDCs) are permitted by State laws or regulations to change rates from time to time to track changes in the cost of natural gas supply and transportation through gas cost adjustments without a review of general rates;

Whereas, many such gas cost adjustment mechanisms provide for the periodic adjustment of rates to true up the difference between gas costs billed to consumers and gas costs incurred;

Whereas, the gas cost adjustment mechanisms have been found justified due to characteristics of the costs associated with purchasing and transporting gas to an LDC's distribution system; i.e., that such cost may make up a sizable portion of the total rate for natural gas service, that such costs are affected by many market conditions that are not within the control of the LDC, that such gas costs are volatile and may change significantly in a short time;

Whereas, some State regulatory authorities have been petitioned by LDCs to broaden the sort of expenses that may be recovered through gas cost adjustment mechanisms to include a portion of the expenses associated with uncollectible charges experienced by the LDC;

Whereas, the characteristics of uncollectible accounts are materially different from gas costs; i.e., while they are somewhat affected by variations in rates caused by changes in gas costs, uncollectible accounts expenses do not make up a sizeable portion of the total rate for natural gas service, they are affected by factors such as staffing and procedures within the control of the LDC, and the changes in uncollectible costs do not tend to be volatile;

Whereas, an expanded definition of gas costs would shift more risk to ratepayers and may remove traditional or performance based incentives for utilities to minimize costs;

THEREFORE BE IT RESOLVED, that NASUCA encourages state regulatory authorities to limit the use of gas cost adjustment mechanisms to the cost of purchasing and transporting natural gas supply to the LDC's distribution system.

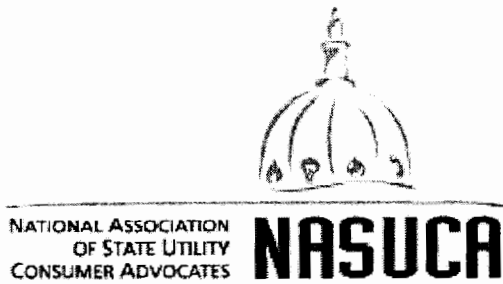
BE IT FURTHER RESOLVED, that the Gas Committee of NASUCA, with the approval of the Executive Committee of NASUCA, is authorized to take all steps consistent with this Resolution in order to secure its implementation.

Submitted by:

June, 15, 2004

Approved by NASUCA

91970



NASUCA RESOLUTION

HIGH WINTER ENERGY COSTS RESOLUTION

WHEREAS the cost of home heating energy has always burdened low income households disproportionately compared with households of all other income levels; and

WHEREAS one of the most effective means of measuring this disparity is to evaluate the energy burden of a household by dividing the cost of home energy by the gross income of the same household to determine the percentage of income needed to meet energy costs; and

WHEREAS in 2005, the National Energy Assistance Directors Association (“NEADA”) determined that all low-income households used, on average, 15% of their gross household income for energy costs (6% for heat alone), while all households used, on average, only 3% of their gross household income for energy costs (1% heat alone); and

WHEREAS in 2004, elderly households in receipt of Supplemental Security Income paid nearly 19% of their income for energy, and households in receipt of Aid to Families with Dependent Children paid 26% of their income for energy; and

WHEREAS the Energy Information Administration (“EIA”) has forecast dramatic increases in the cost of energy which will have an immediate and deleterious short term effect on the already disproportionate energy burden on low-income households; and

WHEREAS, based on EIA data from September 2005, the average family heating with oil could spend as much as \$1,666 during the winter of 2005-2006. This would represent an increase of \$403 over the costs for the winter of 2004-2005 and an increase of \$714 over the costs for the winter of 2003-2004; and

WHEREAS the EIA anticipates that heating fuel expenditure increases from the winter of 2004 to the winter of 2005 are likely to average 73% for natural gas in the Midwest; 19% for electricity in the South; 31% for heating oil in the Northeast; and 41% for propane in the Midwest; and

WHEREAS, the Center on Budget and Policy Priorities (“CBPP”), an independent, bipartisan research institute, calculated (<http://www.cbpp.org/10-6-05bud.htm>) that the average low income household (income below the greater of 150% of the federal poverty guidelines or 60% of the state median income) will incur an average heating bill increase of \$500 for the 2005-2006 winter; and

WHEREAS the easily predictable outcome of the combination of the extreme energy burden currently facing low-income households and the anticipated increase in home energy costs is the creation of a “perfect storm” which will result in an unparalleled challenge to the energy safety net below low-income households; and

WHEREAS these increased costs for home energy during the winter of 2005-2006 were predicated on the foreseeable actions in the marketplace based upon historically accurate and verifiable facts, factors, formulae and information; and

WHEREAS short-term and long-term effects of Hurricanes Katrina and Rita including the damage and destruction to the production, storage, transportation and infrastructure of the natural gas and crude oil industries, and the resulting escalation of home energy costs as a result of the depletion of reserves and the inability of the industries to quickly recover from the devastation remains to be calculated; and

WHEREAS the severe constraints on state and local government budgets already strain the ability of those entities to reinforce the low income safety net; and

WHEREAS the nonprofit, faith-based, and other community-based organizations, secondarily charged with the task of assisting low-income households with problems such as the imminent energy crisis are similarly constrained by limited resources and increasing energy costs; and

WHEREAS the Low Income Home Energy Assistance Program (“LIHEAP”) is a federally-funded, state-administered energy plan designed to provide funding to the states to assist low-income households in meeting the costs of home energy; and

WHEREAS since the winter of 2001-2002, the national appropriation for LIHEAP has wholly failed to match the pace of the increase in home heating costs; and

WHEREAS the anticipated funding for the 2005-2006 LIHEAP Year fails to keep pace with inflation and would fail to be even minimally adequate to compensate for the anticipated spikes in home energy and home heating energy now predicted by the EIA; and

WHEREAS in 2005, NEADA determined that LIHEAP funding between the 2001-2002 and 2004-2005 fiscal year increased by 21.4%, but the share of a low-income households’ heating expenditures met by the average LIHEAP grant fell from 49.4% to 25.2% for heating oil, from 52.3% to 33.4% for natural gas, and from 35.5% to 23.1% for propane; and

WHEREAS in 2005, NEADA determined that between 2001-2002 and 2004-2005 the price of oil for heating increased by \$624, and the price of natural gas for heating increased by \$352, and the price of propane for heating increased by \$489, yet, the average LIHEAP grant increased by \$3; and

WHEREAS, according to the EIA, while the average cost of home heating fuel for the coming winter may rise precipitously: heating oil by 98%, propane by 55%, and natural gas by 58%, the national appropriation for LIHEAP, since the winter of 2001-2002, has risen by only about 20%; and

WHEREAS the proposed 2005-2006 executive federal budget appropriation called for a decrease in funding of approximately \$250 million with no emergency contingency funding; and

WHEREAS the House of Representatives Labor-HHS-Education Appropriations Committee has proposed FY 2006 LIHEAP funding at \$2.006 billion in regular funding and no emergency contingency funding; and

WHEREAS the Senate Appropriations Committee has proposed FY 2006 LIHEAP funding at \$1.8 billion in regular funding and \$300 million in emergency contingency funding; and

WHEREAS the CBPP calculates that, in order to maintain 2005-2006 LIHEAP purchasing power, taking into consideration general inflation, at the same level as 2004-2005 LIHEAP, the national appropriation should increase to \$3.025 billion; and

WHEREAS the CBPP calculates that a mere 5% increase in the number of eligible applicants for LIHEAP assistance would require additional national 2005-2006 LIHEAP funding in the amount of \$150 million; and

WHEREAS the CBPP calculates that to hold beneficiaries of LIHEAP assistance harmless in the face of the entire expected price increase would require additional 2005-2006 LIHEAP funding in the amount of \$2.033 billion; and

WHEREAS the CBPP calculates that the total minimum federal appropriation required for the 2005-2006 LIHEAP is \$5.208 billion; and

WHEREAS LIHEAP remains a targeted block grant program with the built-in flexibility and an established federal-state partnership to effectively and efficiently deliver the funding necessary to ease the crisis on increasingly unaffordable energy costs for low-income households; and

WHEREAS the current appropriations and proffered amendments clearly are insufficient to deal with the anticipated increases in home energy costs; *now therefore be it*

RESOLVED that NASUCA urges Congress to appropriate FY 2006 LIHEAP regular funding of at least \$5.208 billion, as recommended by CBPP, and to appropriate an additional \$500

million for emergency contingency funding to assist low-income households in meeting the exorbitant home energy costs anticipated for the winter of 2005-2006; and

BE IT FURTHER RESOLVED that NASUCA authorizes its Standing Committees to develop specific positions and to take appropriate actions consistent with the terms of this resolution to secure its implementation, with the approval of the Executive Committee of NASUCA. The Standing Committees or the Executive Committee shall notify the membership of any action taken to this resolution.

Submitted by:

Michael D. Chrysler, Chair, Consumer Protection Committee
November 16, 2005

Approved by NASUCA

91969

**BEFORE THE
TENNESSEE REGULATORY AUTHORITY
AT NASHVILLE, TENNESSEE**

**IN RE: UNITED TELEPHONE-SOUTHEAST INC. d/b/a EMBARQ
CORPORATION TARIFF FILING TO INCREASE RATES IN
CONJUNCTION WITH THE APPROVED 2007 ANNUAL PRICE CAP
FILING**

DOCKET NO. 07-00269

**EXHIBITS
OF
MICHAEL D. CHRYSLER**

July 1, 2008

**BEFORE THE
TENNESSEE REGULATORY AUTHORITY
AT NASHVILLE, TENNESSEE**

**IN RE: UNITED TELEPHONE-SOUTHEAST INC. d/b/a EMBARQ
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DOCKET NO. 07-00269

**EXHIBITS
OF
MICHAEL D. CHRYSLER**

July 1, 2008

CAPD EXHIBIT: MDC 1



CONNECTED
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THE TRAIT TO INNOVATION

Technology Assessment of Tennessee Residential Consumers September 2007



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THE TRAIL TO INNOVATION.

Presentation Outline

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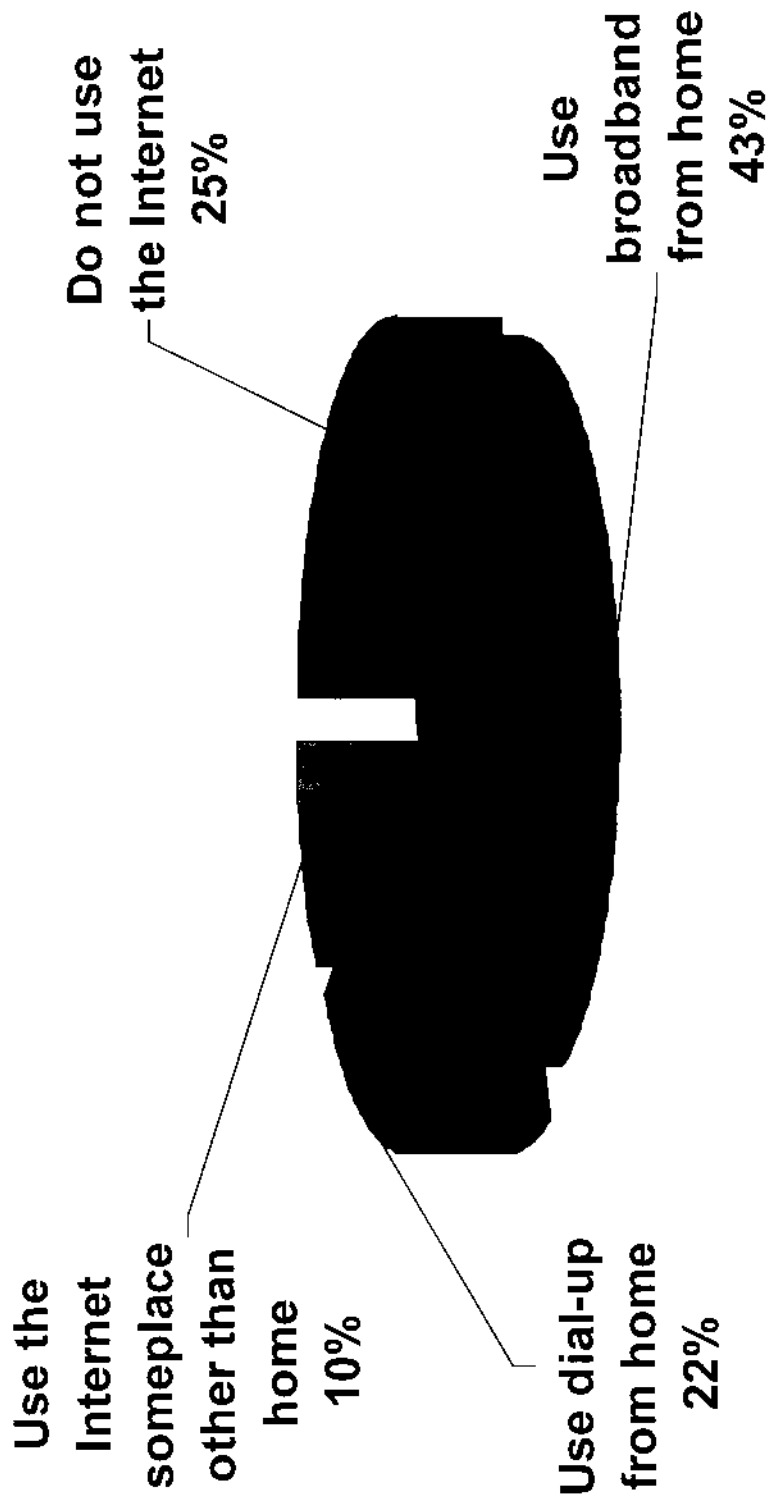
Statewide Assessment



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Tennessee Technology Adoption Summary

Percent of Tennessee residents who:



Q: Do you have an Internet connection at home?

(n = 9,513 TN residents)

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Source: 2007 Connected Tennessee Residential Technology Assessment



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Tennessee Residents With a Computer in their Household



71%

Q: Does your household have a computer?
(n = 9,513 TN residents)
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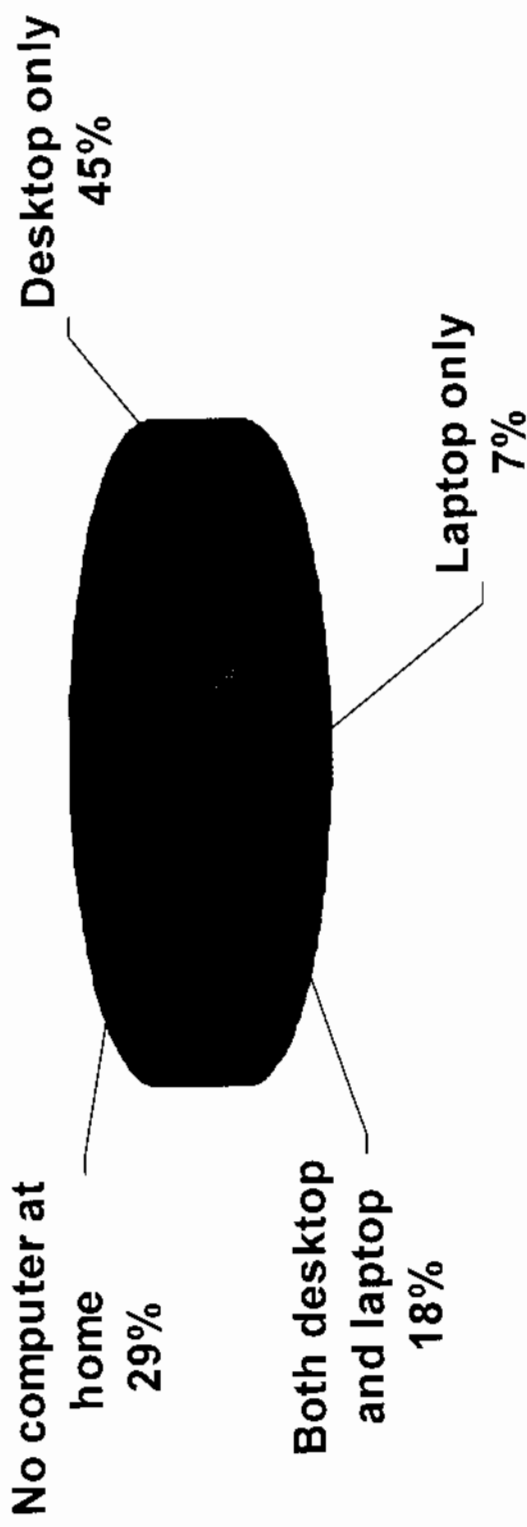
Source: 2007 Connected Tennessee Residential Technology Assessment
www.connectedtennessee.org



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Types of Computers that Tennessee Residents Have at Home

**What type of computer do you have at home?
(among all TN residents):**



Q: What type of computer do you have at home?

(n = 9,513 TN residents)

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Source: 2007 Connected Tennessee Residential Technology Assessment



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Tennessee Residents with an Internet Connection in Their Household



65%

Q: Do you have an Internet connection at home?

(n = 9,513 TN residents)

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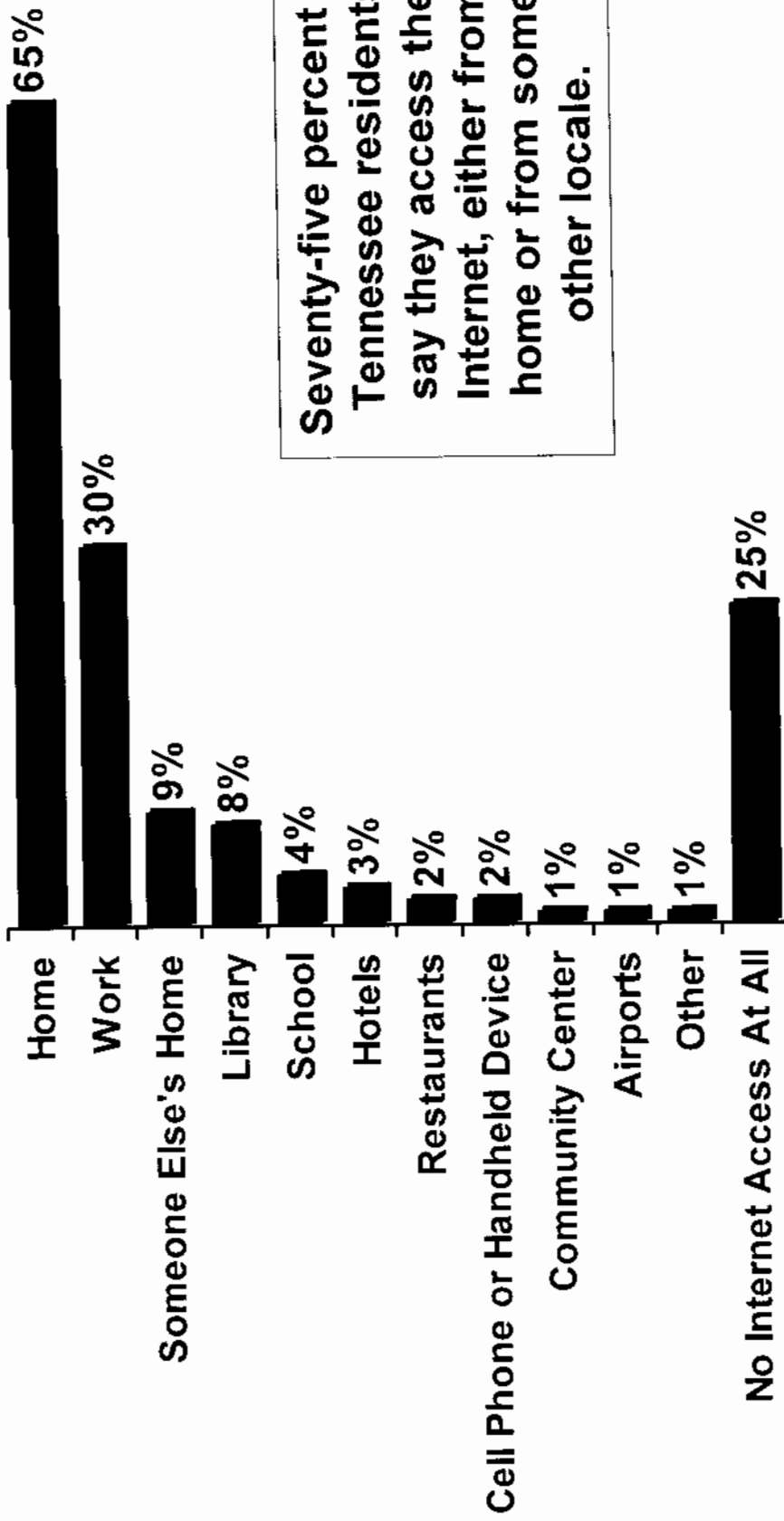
Source: 2007 Connected Tennessee Residential Technology Assessment



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Where Tennessee Residents Access the Internet

Percent of Tennessee residents:



Seventy-five percent of Tennessee residents say they access the Internet, either from home or from some other locale.

Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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Source: 2007 Connected Tennessee Residential Technology Assessment

www.connectedtennessee.org



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Tennessee Residents That Have Broadband in their Household



43%

Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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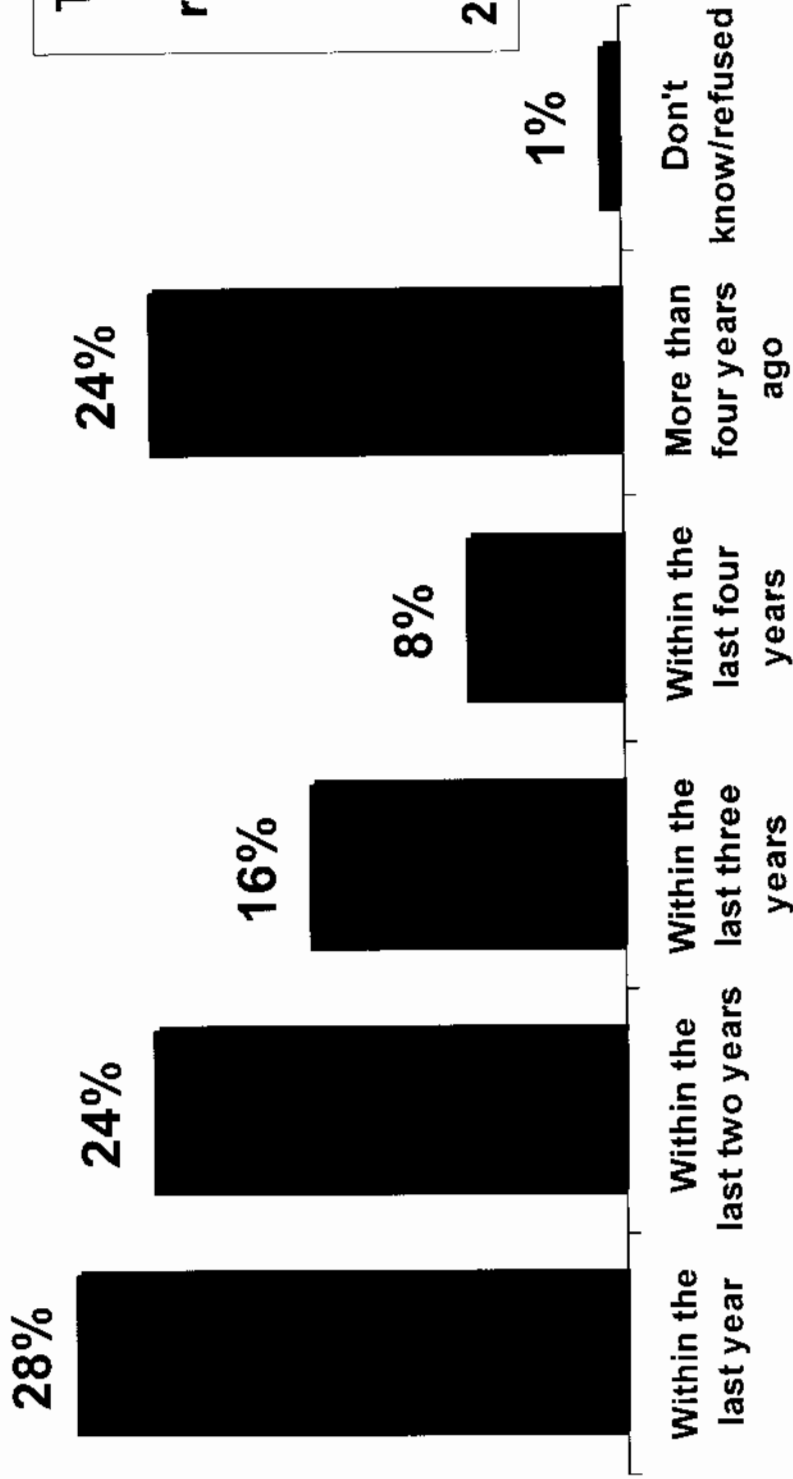
Source: 2007 Connected Tennessee Residential Technology Assessment



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When Did Tennessee Residents Subscribe to Broadband?

Percent of Tennessee residents with a broadband connection at home:



The average Tennessee resident who has broadband first subscribed 2.6 years ago.

Q: When did you subscribe to broadband service?

(n = 4,053 TN residents with broadband service at home)

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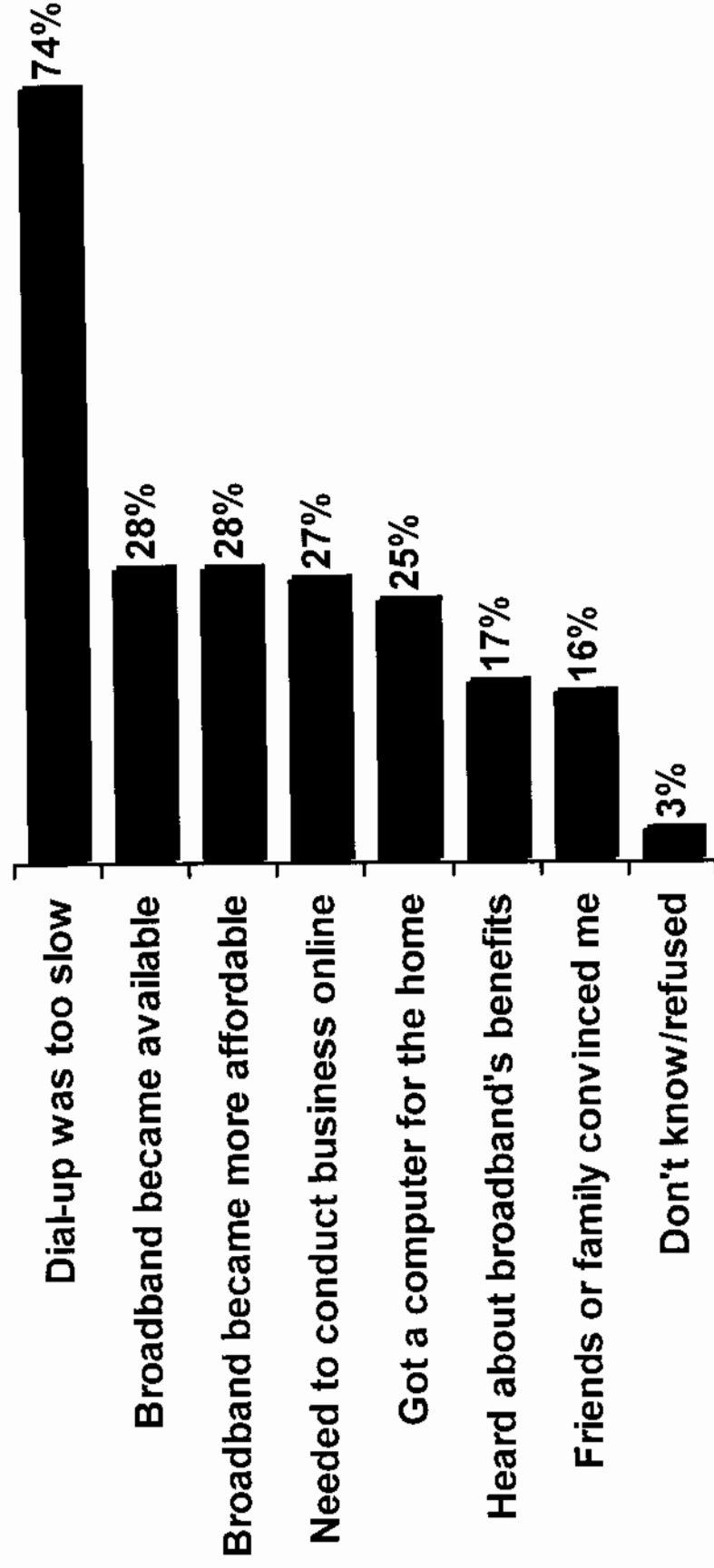
Source: 2007 Connected Tennessee Residential Technology Assessment



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Why Tennessee Residents Subscribe to Broadband

Percent of Tennessee residents with a broadband connection at home:



Q: Which of the following contributed to your decision to subscribe to broadband service?

(n = 4,053 TN residents with broadband service at home)

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Source: 2007 Connected Tennessee Residential Technology Assessment

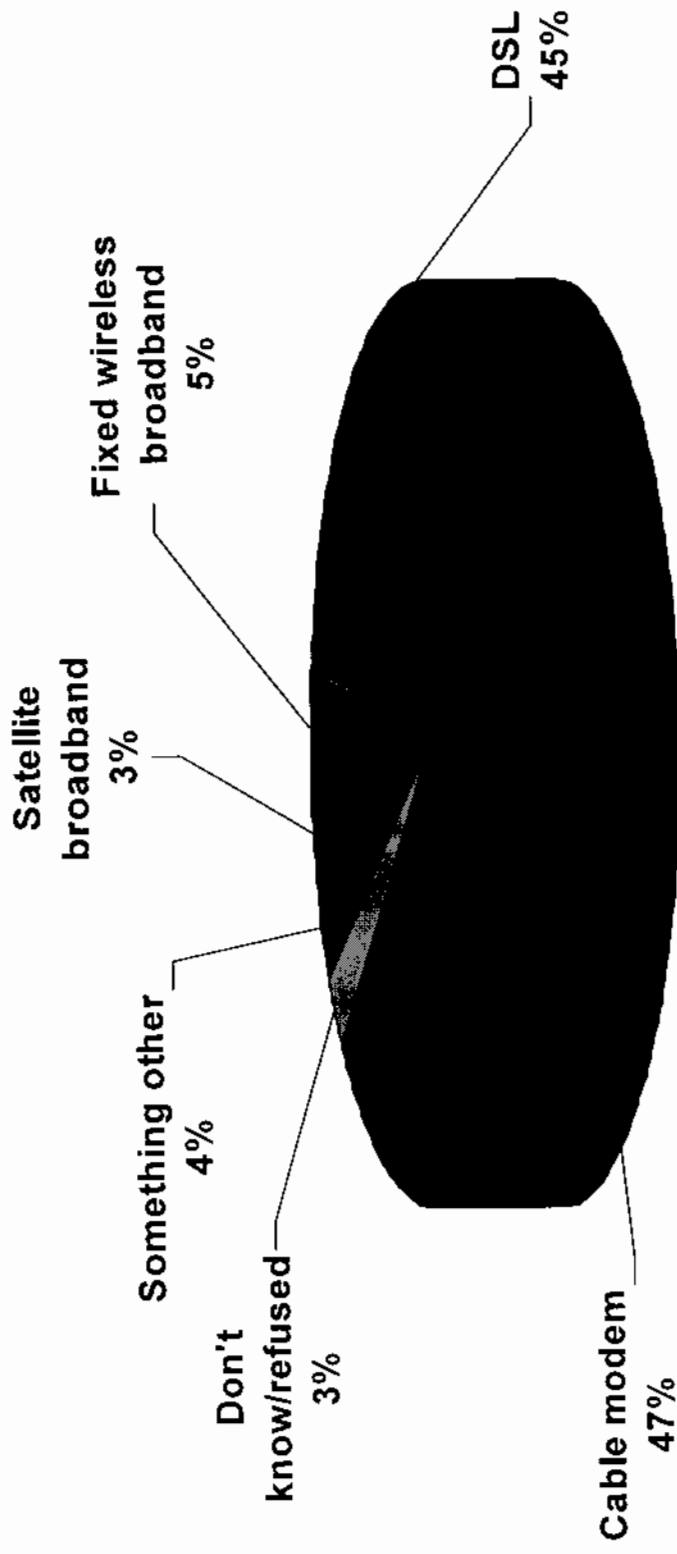
www.connectedtennessee.org



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Types of Broadband Service that Tennessee Residents Use

Percent of Tennessee residents with a broadband connection at home:



Q: Which of the following describes the broadband service you have at home?

(n = 4,053 TN residents with broadband service in their household)

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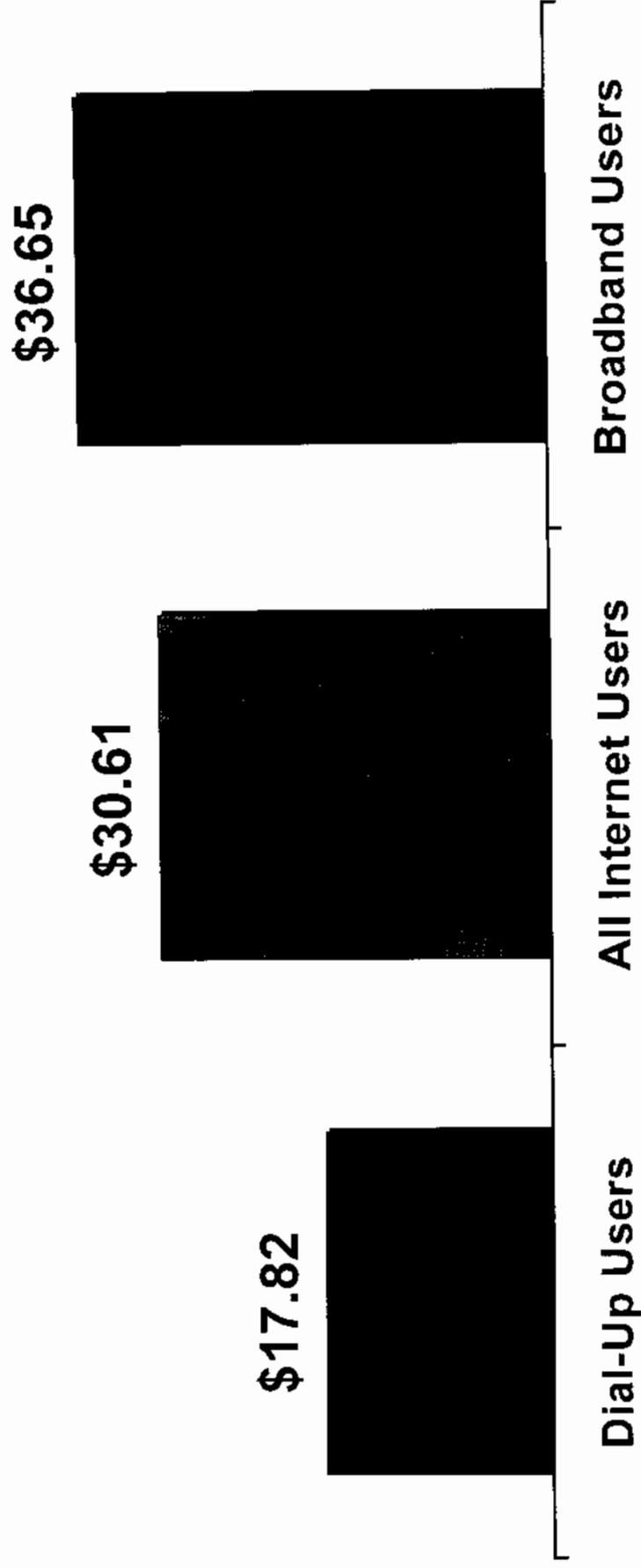
Source: 2007 Connected Tennessee Residential Technology Assessment



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Average Monthly Cost of Internet Service for Tennessee Residents

Average cost of home Internet service among:



Q: What do you pay each month for your Internet service?

(n = 6,191 TN residents with Internet service at home)

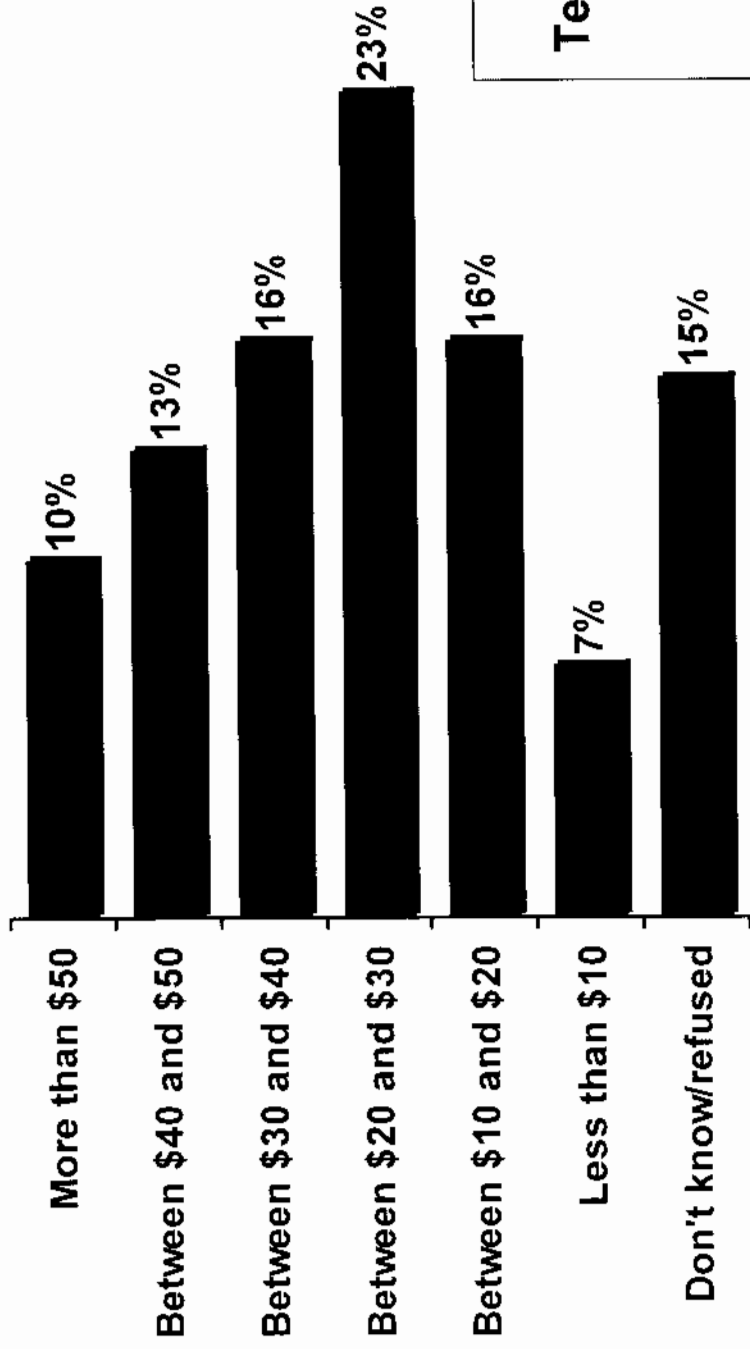
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Source: 2007 Connected Tennessee Residential Technology Assessment



Average Monthly Cost of Internet Service for Tennessee Residents

Percent of Tennessee residents with Internet service at home:



On average,
Tennessee residents
pay \$30.61 per
month for their
Internet service.

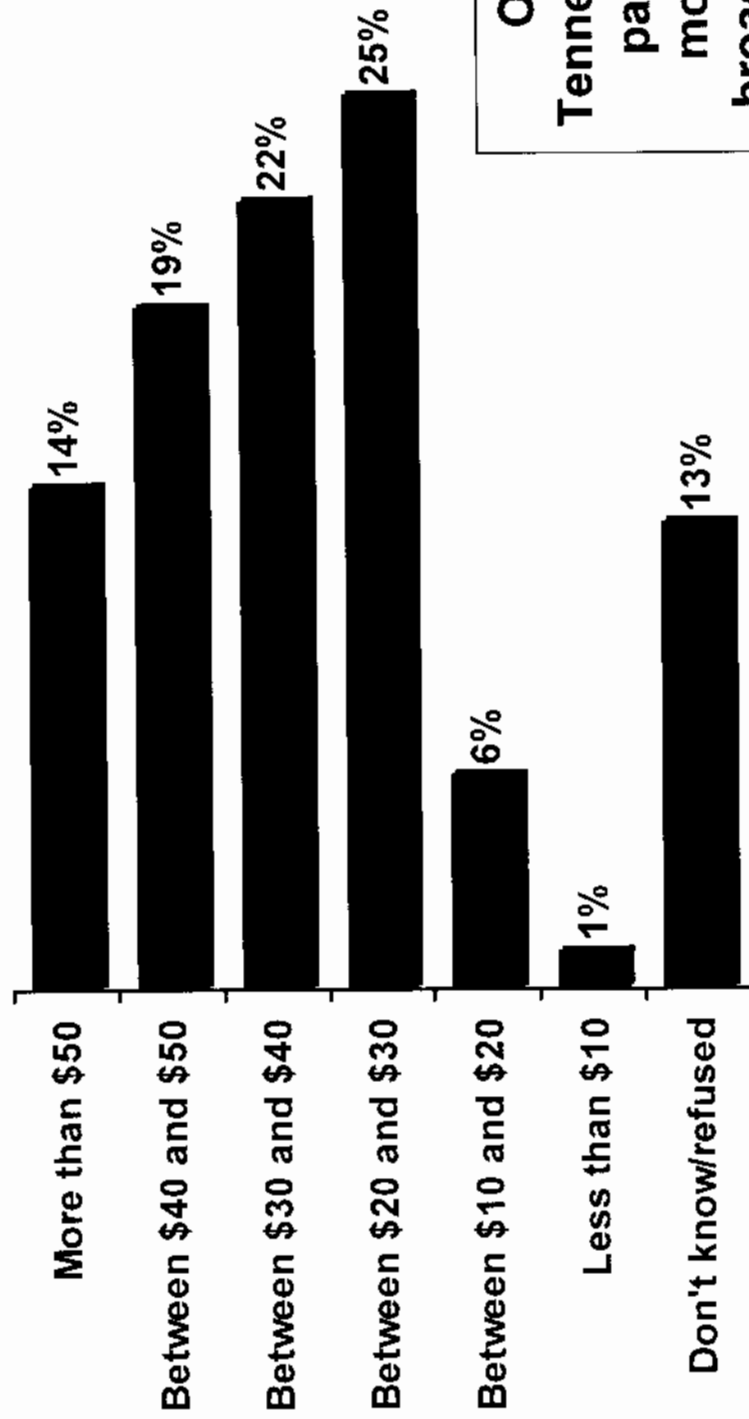
Q: What do you pay each month for your Internet service?
(n = 6,191 TN residents with Internet service at home)
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Average Monthly Cost of Broadband Service for Tennessee Residents

Percent of Tennessee residents with broadband service at home:



**On average,
Tennessee residents
pay \$36.65 per
month for their
broadband service.**

Q: What do you pay each month for your Internet service?
(n = 4,053 TN residents with broadband service at home)
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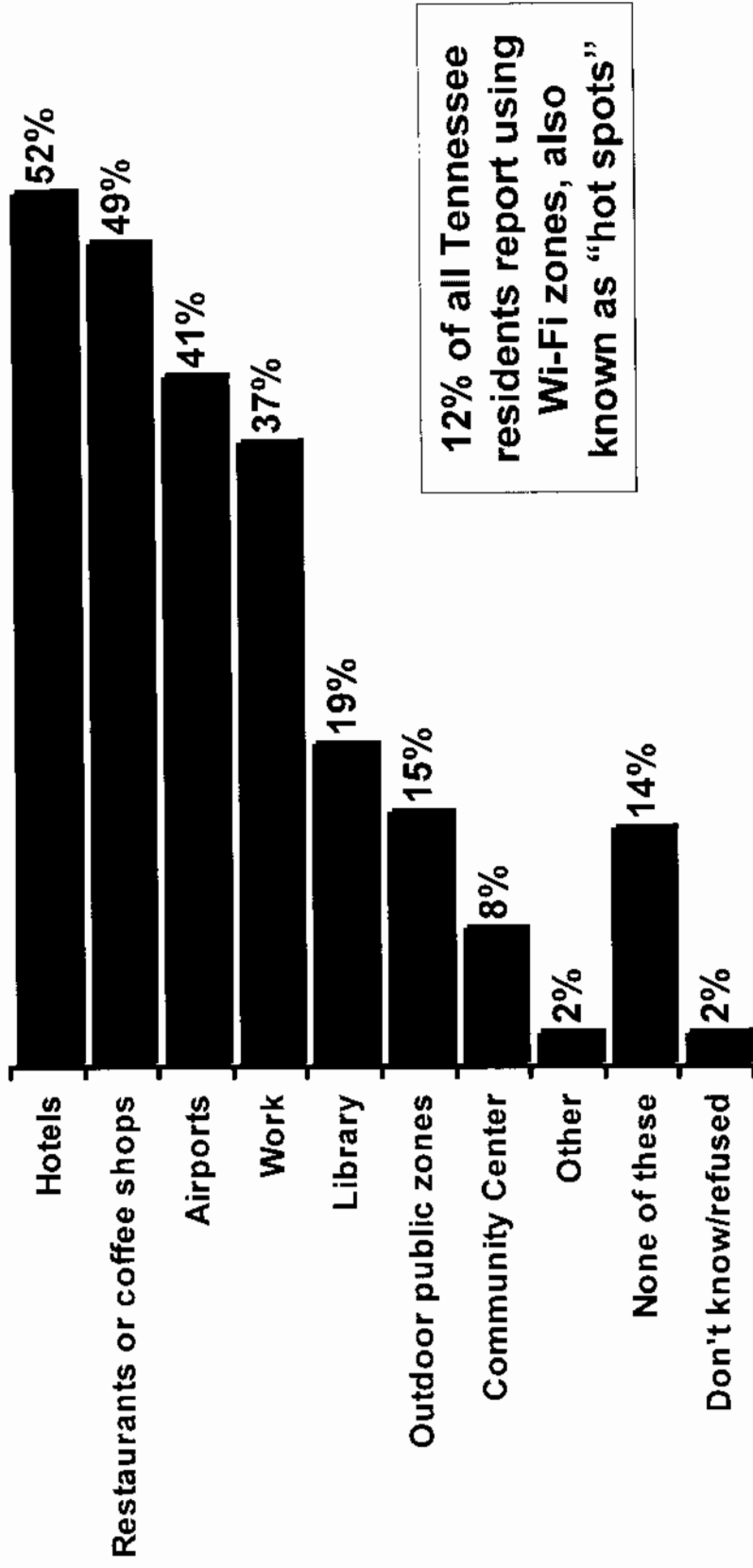
Source: 2007 Connected Tennessee Residential Technology Assessment
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Wi-Fi Zone (“Hot Spot”) Usage

Top Wi-Fi zones (among residents who use hot spots):



Q: Do you regularly use hot spots at any of the following locations?

(n = 1,160 TN residents who use Wi-Fi hot spots)

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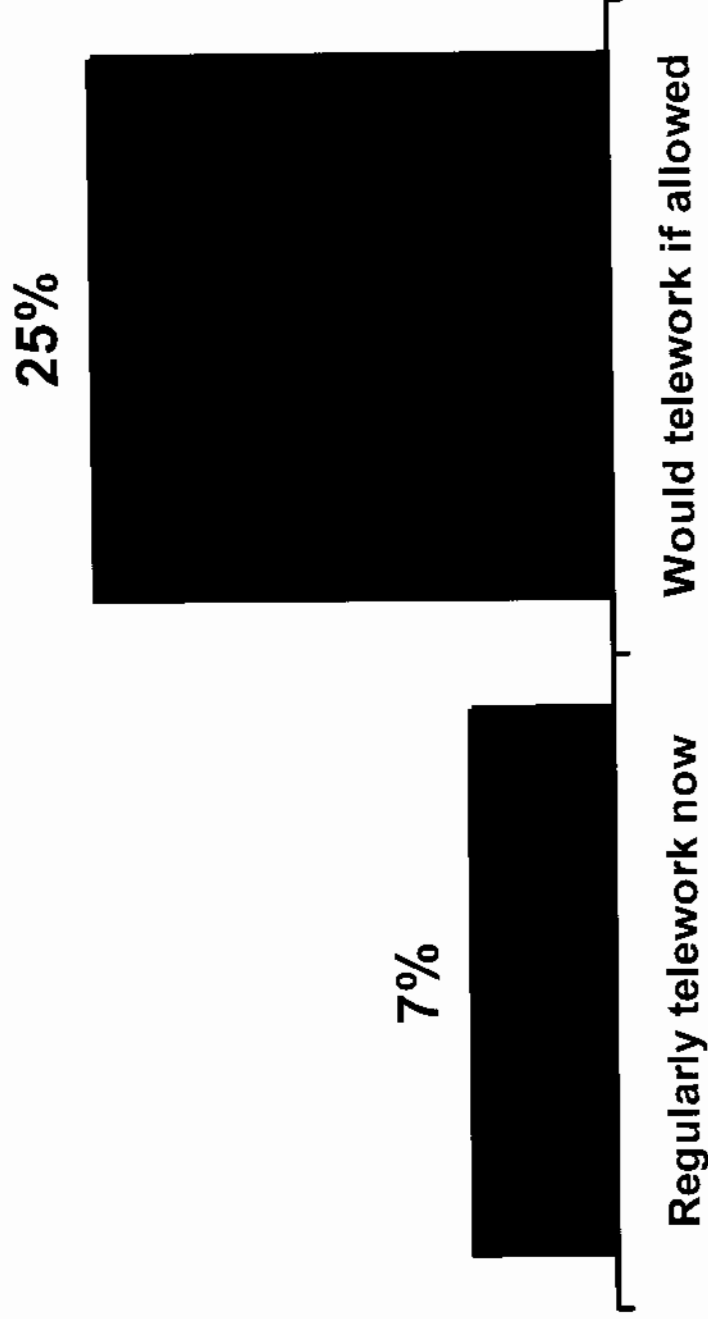
Source: 2007 Connected Tennessee Residential Technology Assessment



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Tennessee Residents and Telework

Among Tennessee residents employed full or part time:



Q: Do you regularly work from home through a broadband connection, commonly known as teleworking?

(n = 5,487 TN residents employed full or part time)

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Source: 2007 Connected Tennessee Residential Technology Assessment



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Tennessee

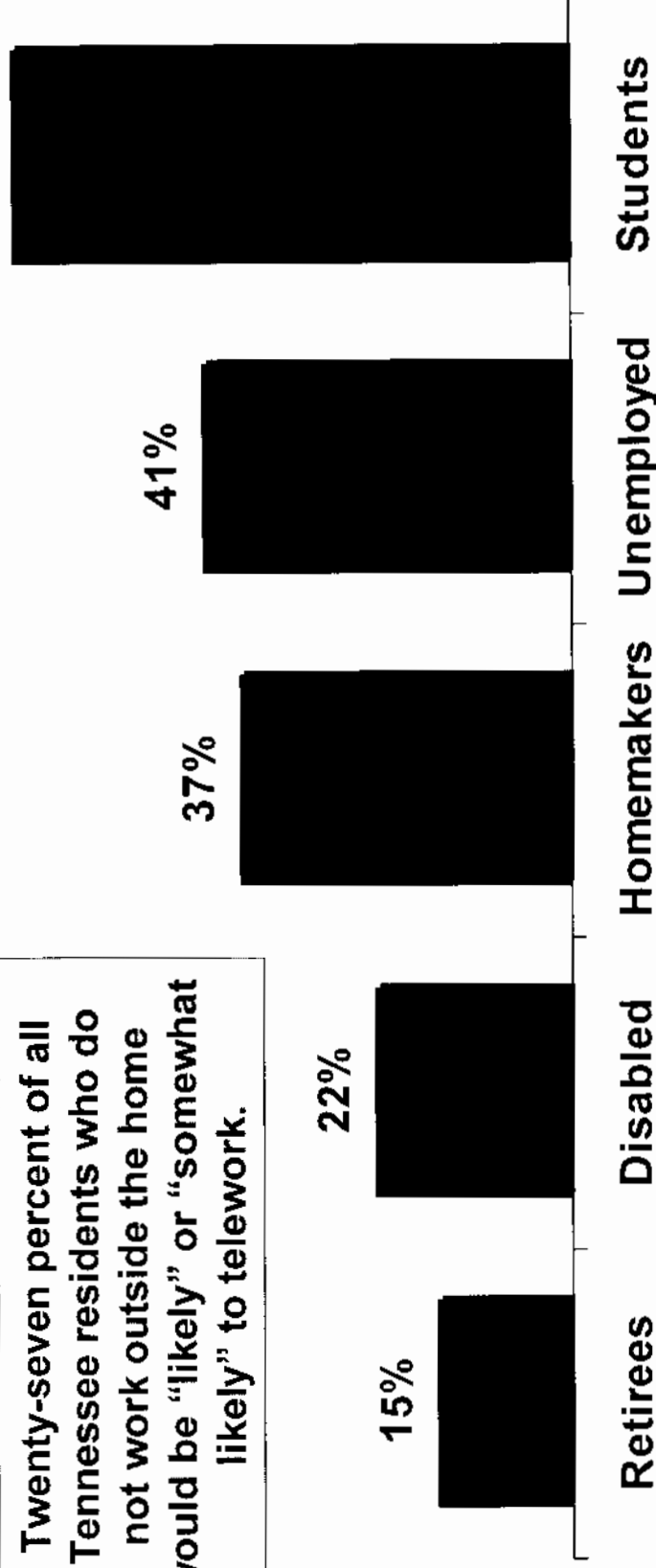
THE TRAIL TO INNOVATION

Potential Teleworkers in the Labor Force

Percent of Tennessee residents "likely" or "somewhat likely" to work outside the home if allowed to telework (among residents *not* currently employed part or full time):

62%

Twenty-seven percent of all Tennessee residents who do not work outside the home would be "likely" or "somewhat likely" to telework.



Q: If you were able to work from home through a broadband connection - commonly known as teleworking - how likely is it that you would work outside the home?

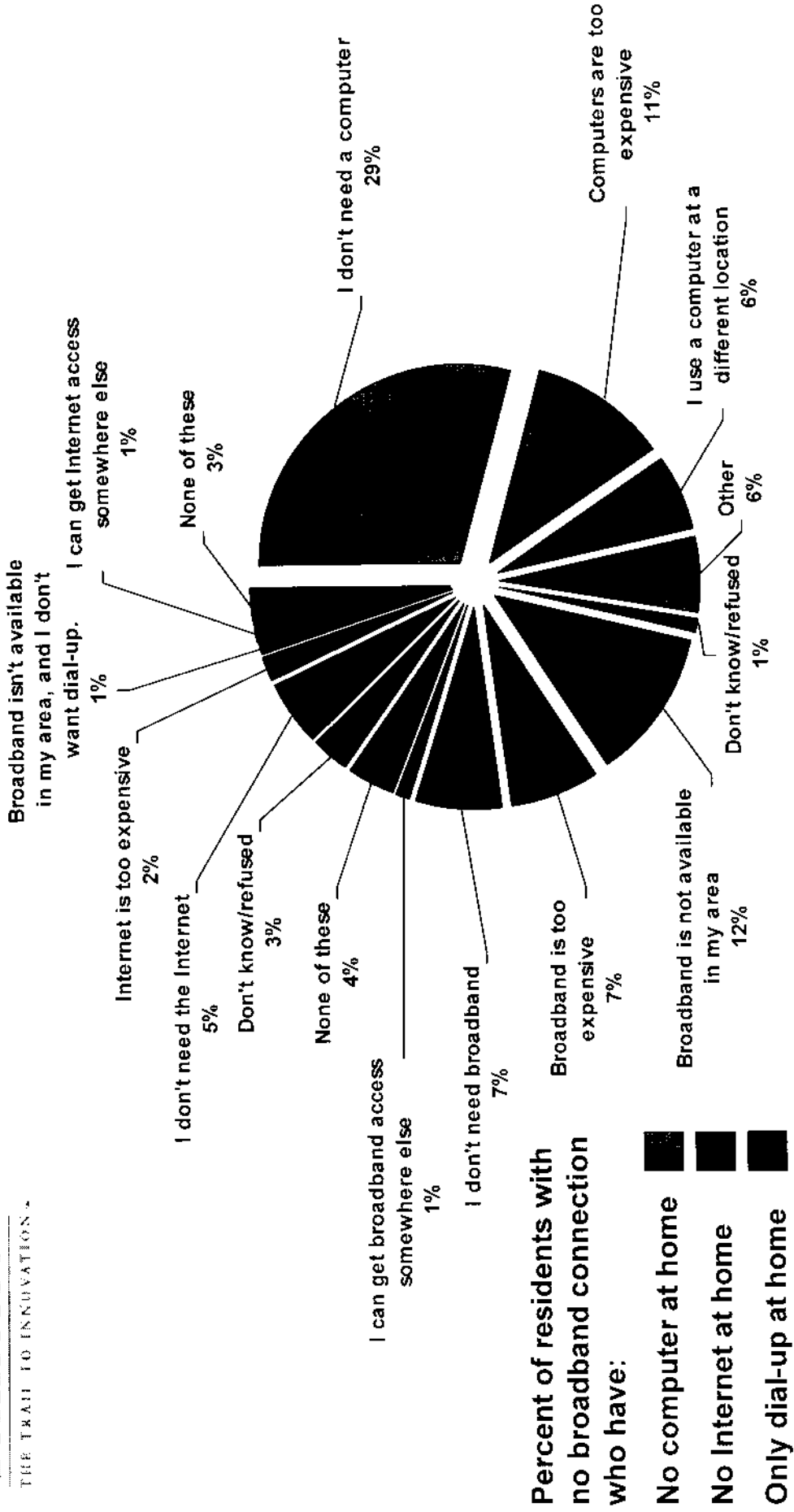
(n = 4,026 TN residents not employed full or part time)

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Source: 2007 Connected Tennessee Residential Technology Assessment



Barriers to Broadband Adoption Among Tennessee Residents With No Broadband Connection



(n = 5,152 TN residents who have no broadband connection at home)

Source: 2007 Connected Tennessee Residential Technology Assessment

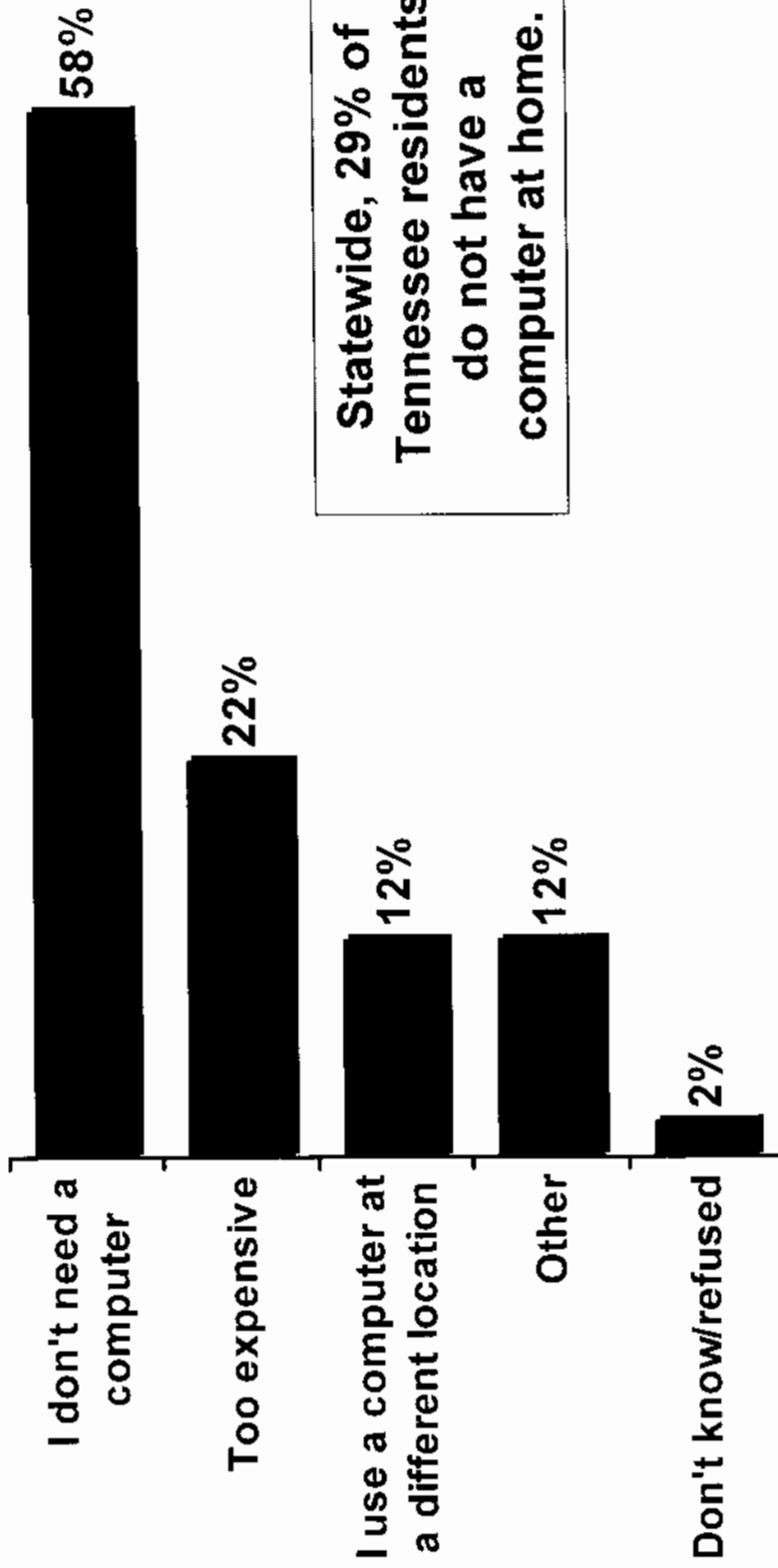


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Barriers to Computer Ownership

Why don't you have a computer at home?

(Among Tennessee residents who do not own a computer):



Q: Why don't you have a computer at home?

(n = 2,735 TN residents with no computer in their household)

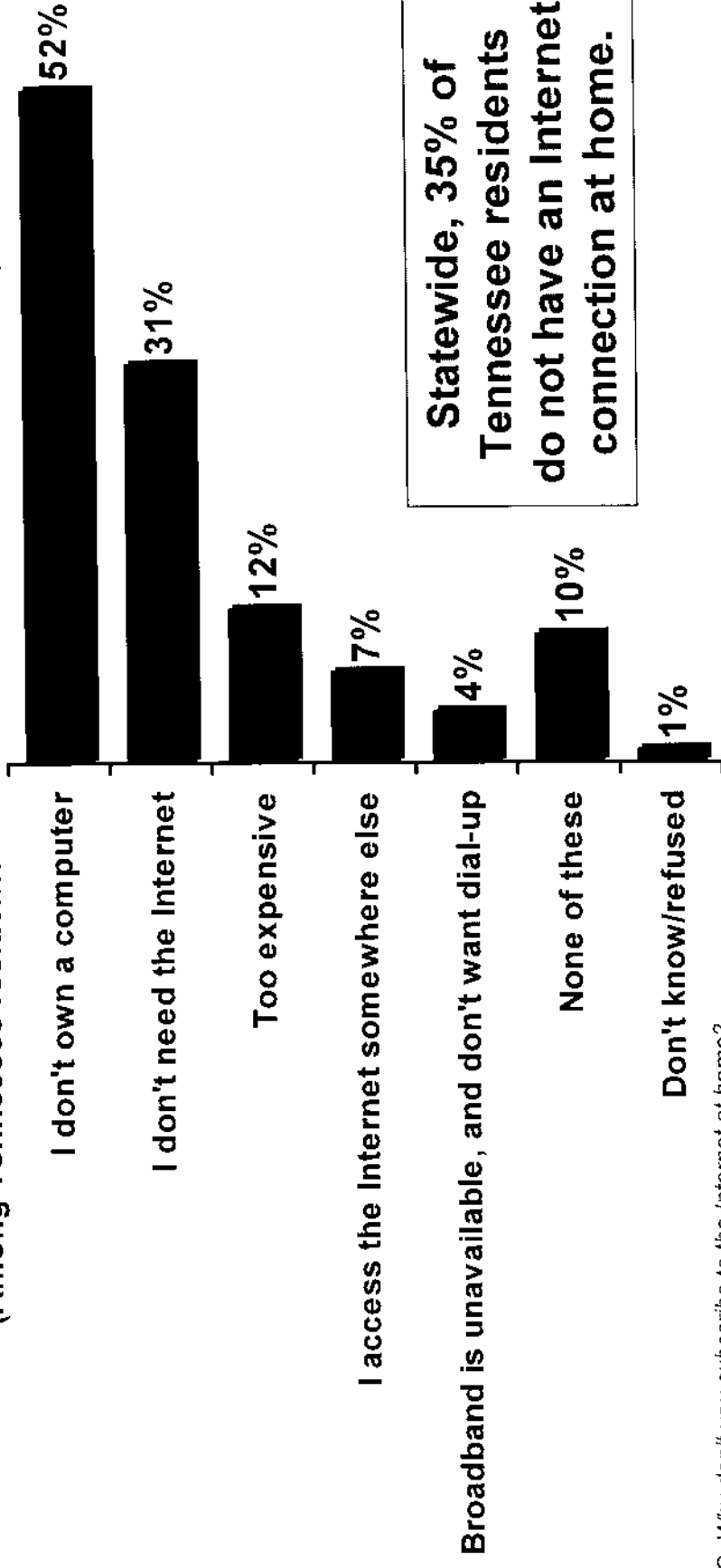
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Barriers to Internet Adoption

Why don't you have an Internet connection at home?

(Among Tennessee residents with no Internet connection at home):



Q: Why don't you subscribe to the Internet at home?

(n = 3,237 TN residents with no Internet service in their household)

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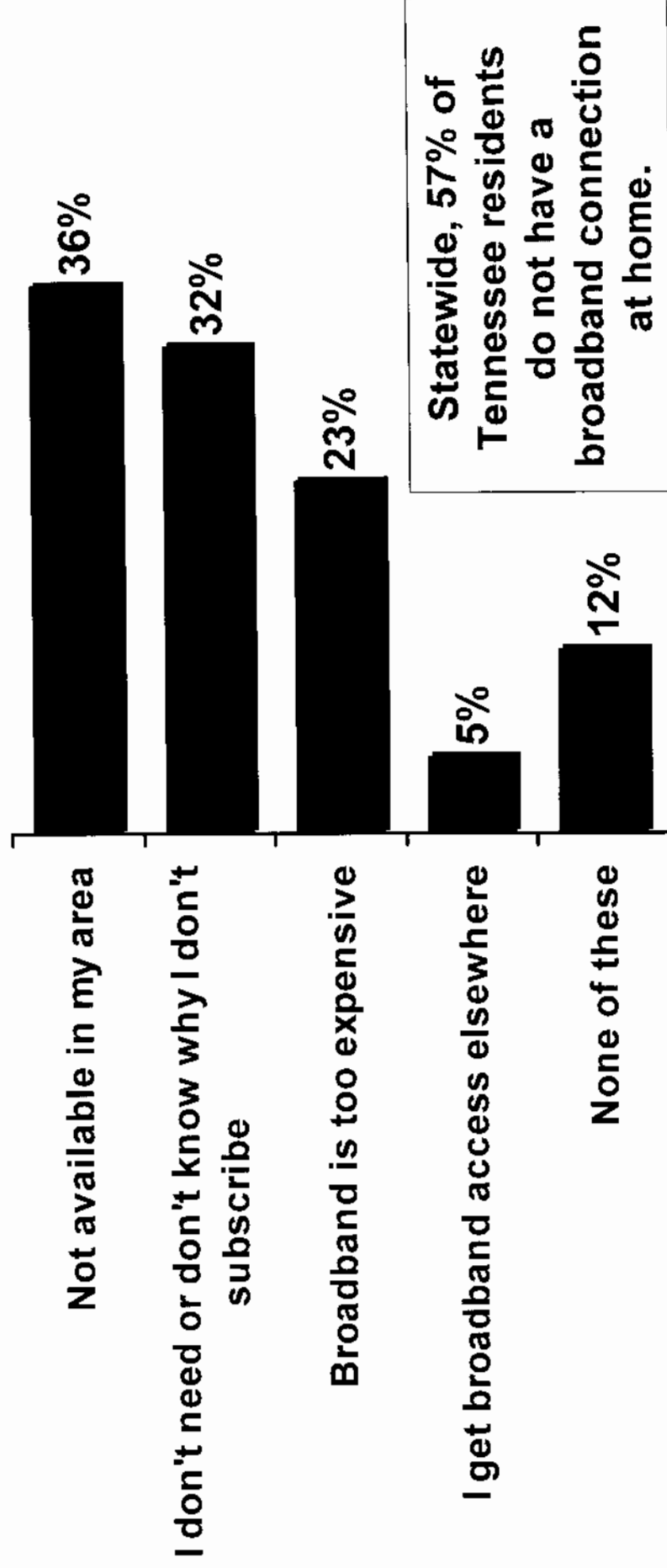


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Barriers to Broadband Adoption Among Dial-Up Users

Why don't you have an Internet connection at home?

(Among Tennessee residents who rely exclusively on dial-up for their home Internet service):



Q: Why don't you subscribe to broadband at home?

(n = 1,787 TN residents with dial-up service at home)

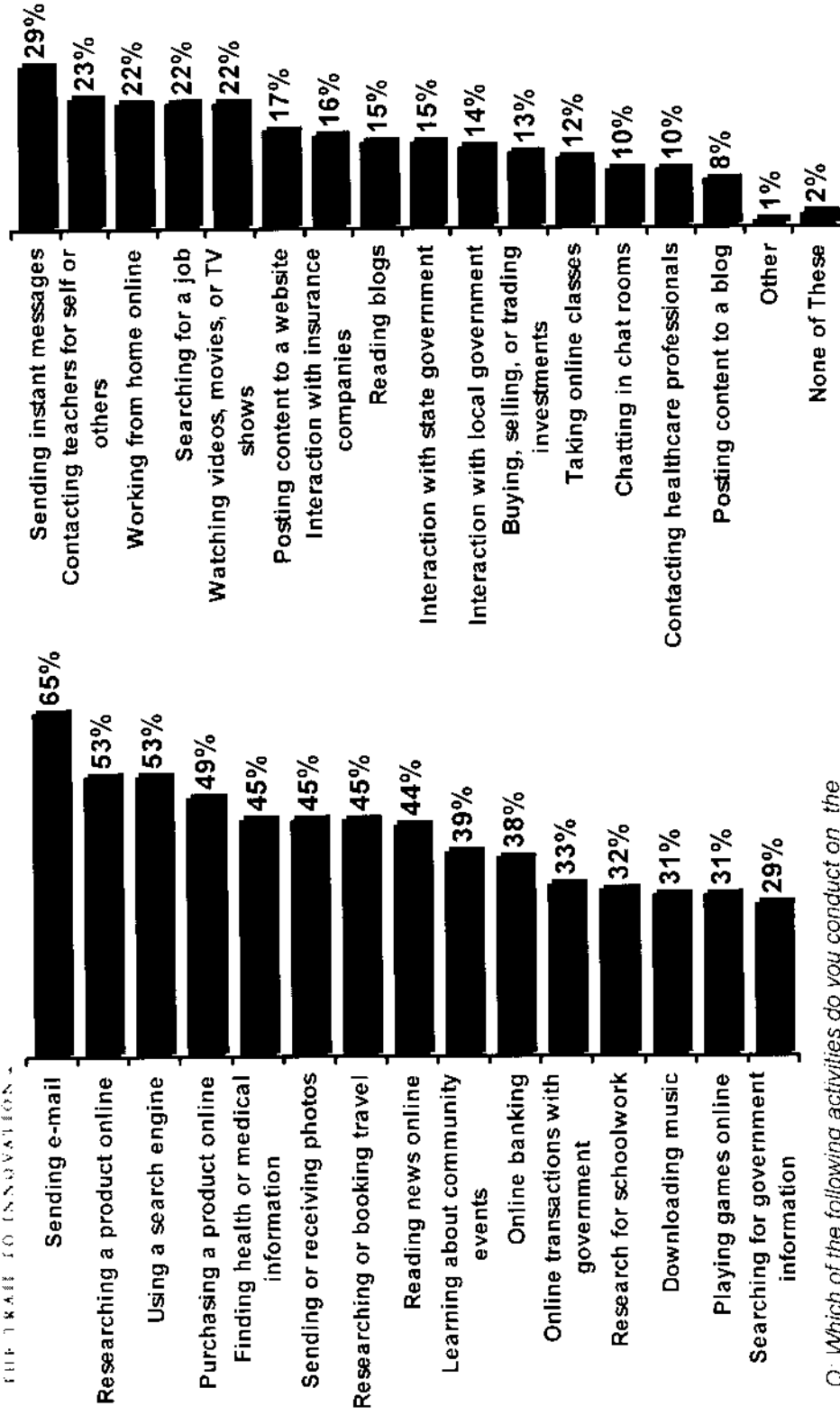
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Source: 2007 Connected Tennessee Residential Technology Assessment



Internet Applications Used by Tennessee Residents

Percent of Tennessee residents who access the Internet and say they use the following applications:



Q: Which of the following activities do you conduct on the Internet?

(n = 7,167 TN residents with Internet service at home)
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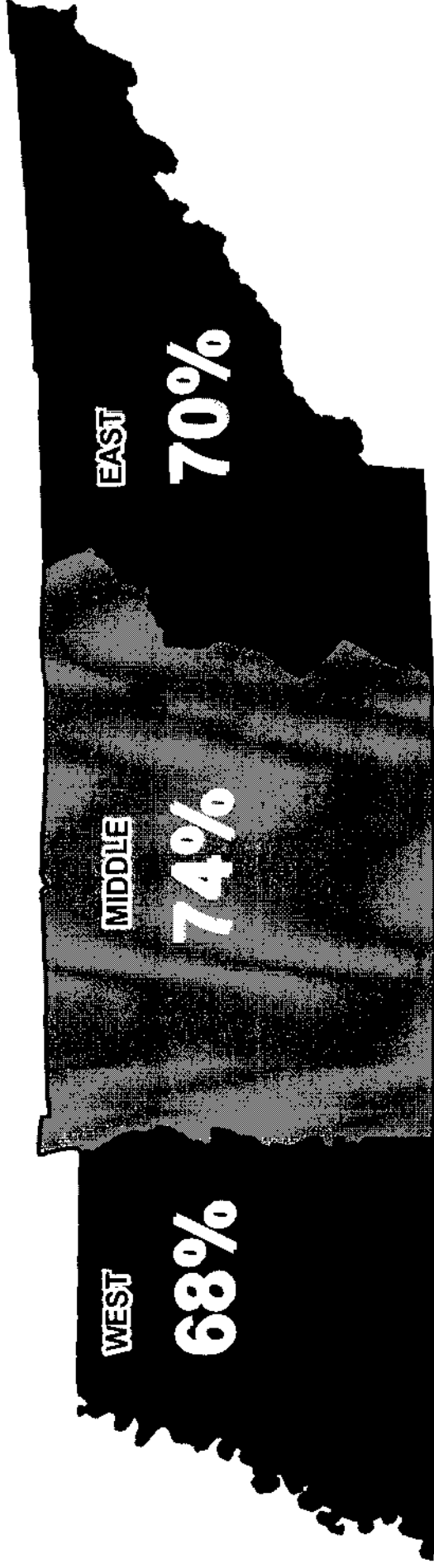
Residential Technology Assessment by Geographic Region



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Tennessee Residents with a Computer at Home (by Grand Division)

Percent of Tennessee residents who have a computer at home:



**Statewide Average: 71% of Tennessee residents report
having a personal computer at home.**

Q: Does your household have a computer?

(n = 9,513 TN residents)

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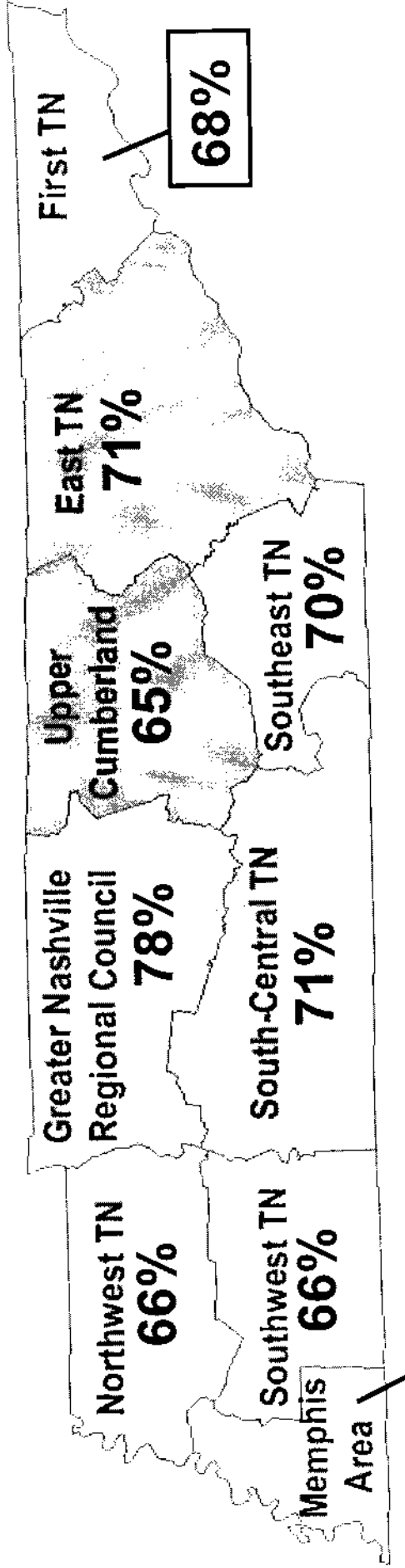
Source: 2007 Connected Tennessee Residential Technology Assessment



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Tennessee Residents with a Computer at Home (by Area Development District)

Percent of Tennessee residents who have a computer at home:



Statewide Average: 71% of Tennessee residents report having a personal computer at home.

Q: Does your household have a computer?

(n = 9,513 TN residents)

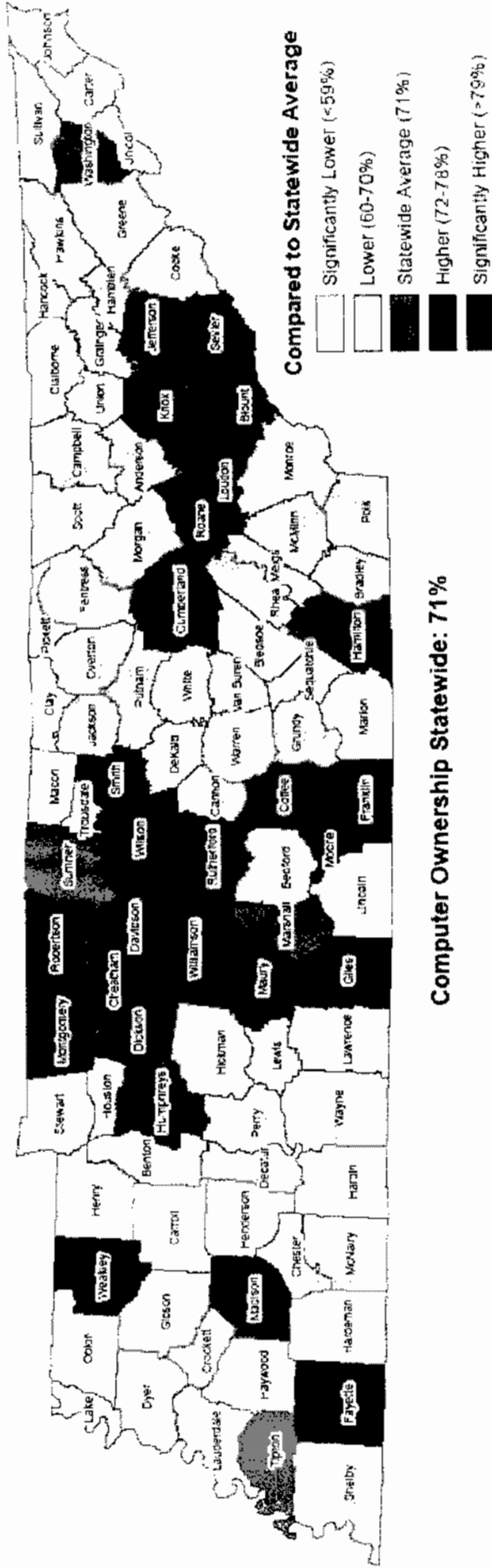
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2007 TENNESSEE RESIDENTIAL BROADBAND TECHNOLOGY ASSESSMENT

RESIDENTIAL COMPUTER OWNERSHIP



Q: Does your household have a computer?

(*n* = 9,513 TN residents)

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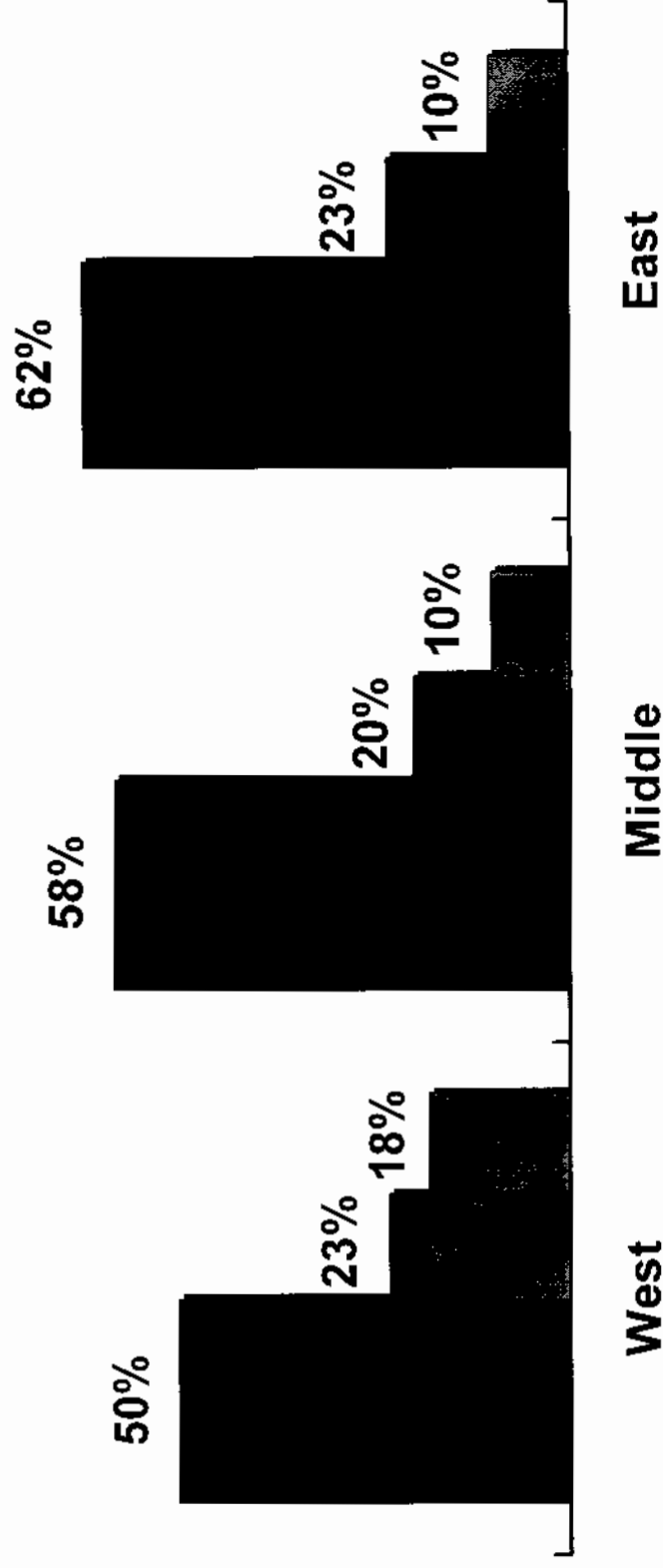


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Barriers to Computer Ownership (by Grand Division)

Top responses given when asked why Tennessee residents do not own a computer:

■ Don't need a computer ■ Too expensive ■ Use a computer somewhere else



Q: Why don't you have a computer at home?

(n = 2,735 TN residents with no computer in their household)

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Source: 2007 Connected Tennessee Residential Technology Assessment



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Tennessee Residents who Use the Internet from Home (by Grand Division)

Percent of Tennessee residents who have an Internet connection at home:



**Statewide Average: 65% of Tennessee residents report
having an Internet connection at home.**

Q: Do you have an Internet connection at home?

(n = 9,513 TN residents)

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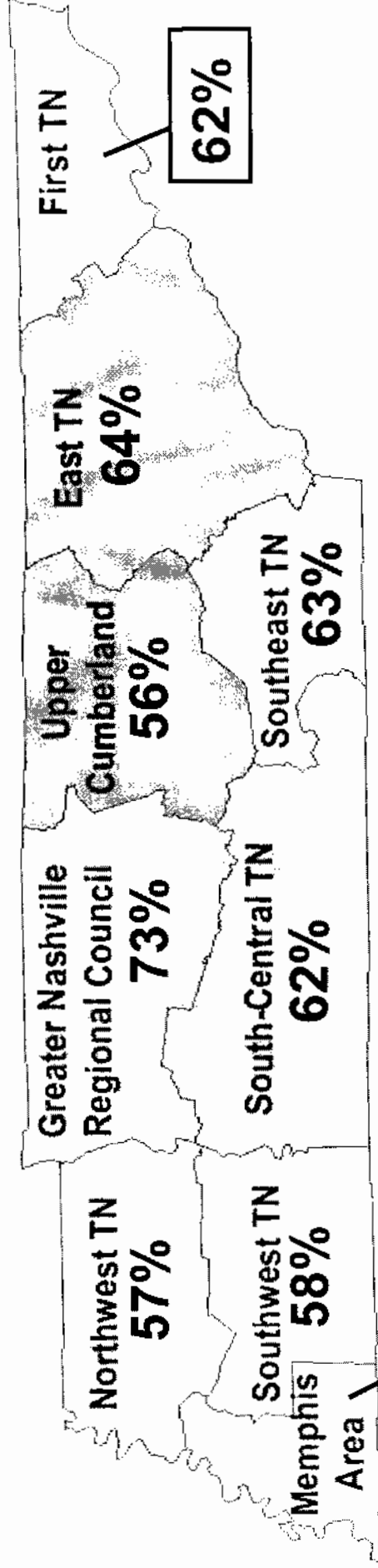
Source: 2007 Connected Tennessee Residential Technology Assessment



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Tennessee Residents who Use the Internet from Home (by Area Development District)

Percent of Tennessee residents who have an Internet connection at home:



Statewide Average: 65% of Tennessee residents report having an Internet connection home.

Q: Do you have an Internet connection at home?

(n = 9,513 TN residents)

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Source: 2007 Connected Tennessee Residential Technology Assessment

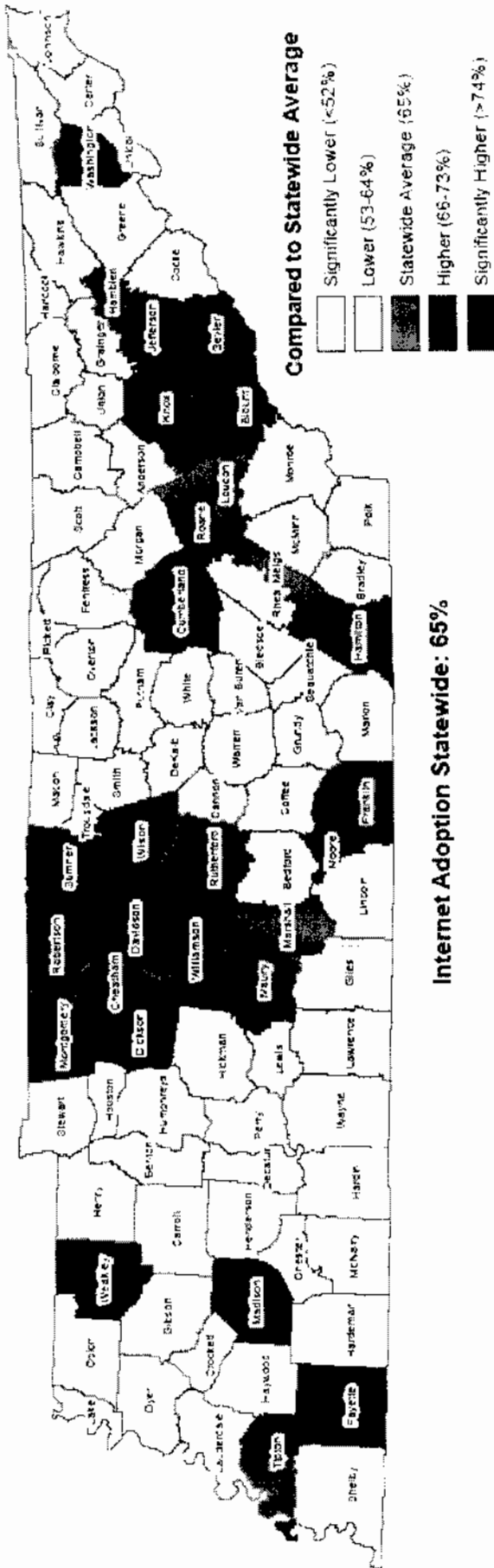


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Tennessee Residents who Use the Internet from Home (by County)

2007 TENNESSEE RESIDENTIAL BROADBAND TECHNOLOGY ASSESSMENT

RESIDENTIAL INTERNET ADOPTION



Q: Do you have an Internet connection at home?

(n = 9,513 TN residents)

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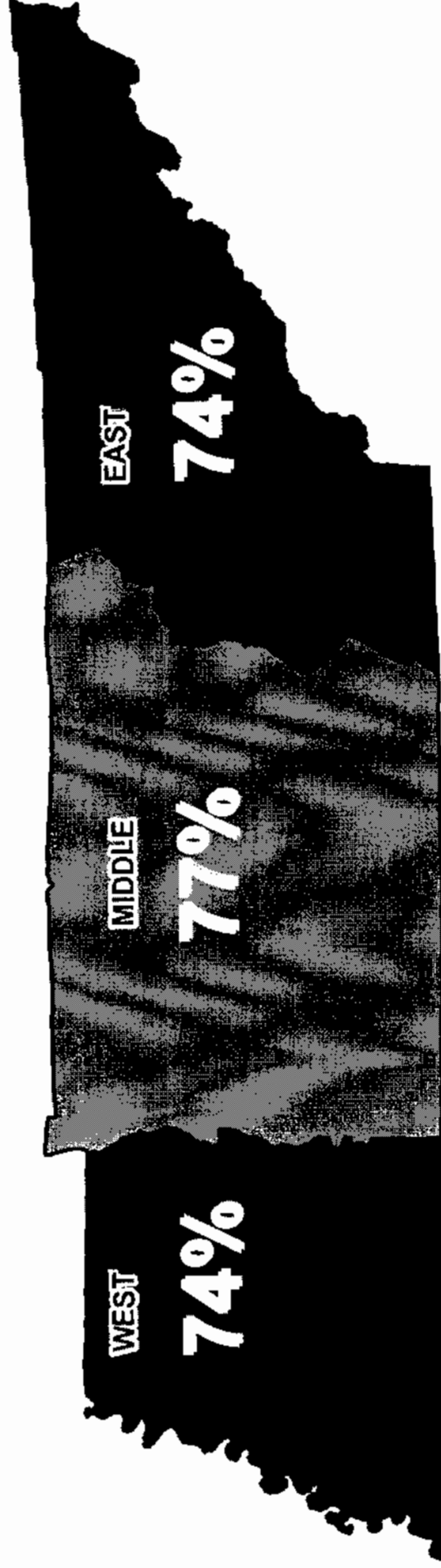
Source: 2007 Connected Tennessee Residential Technology Assessment



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Tennessee Residents Who Use the Internet at Home or Some Other Place (by Grand Division)

Percent of Tennessee residents who use the Internet at home or some other place:



**Statewide Average: 75% of Tennessee residents
access the Internet from home or someplace else.**

Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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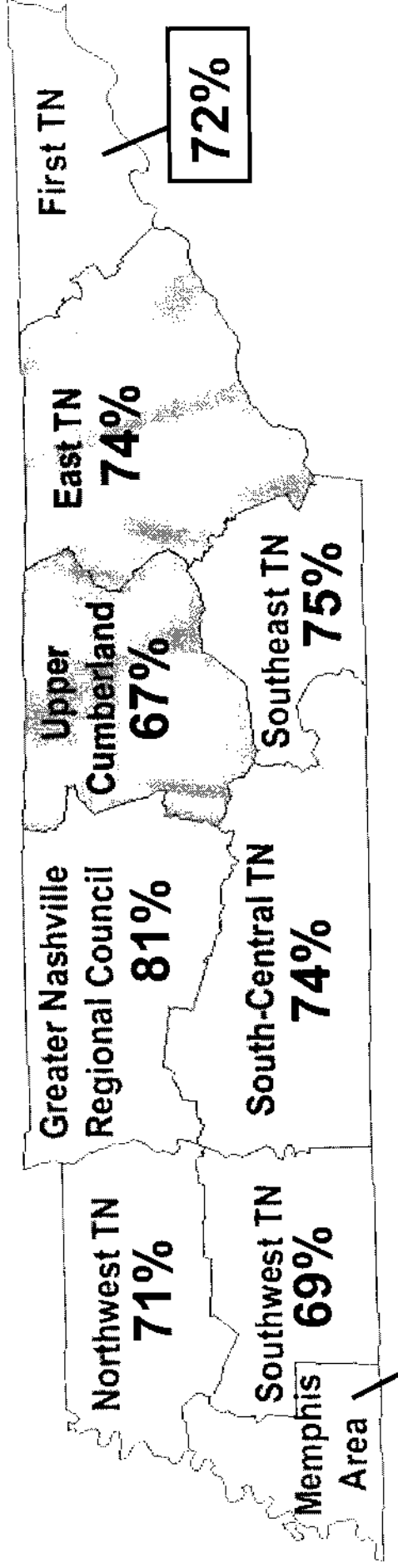
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Tennessee Residents who Use the Internet from Home or Some Other Place (by Area Development District)

Percent of Tennessee residents who use the Internet from home or some other place:



Statewide Average: 75% of Tennessee residents report accessing Internet from home or someplace else.

Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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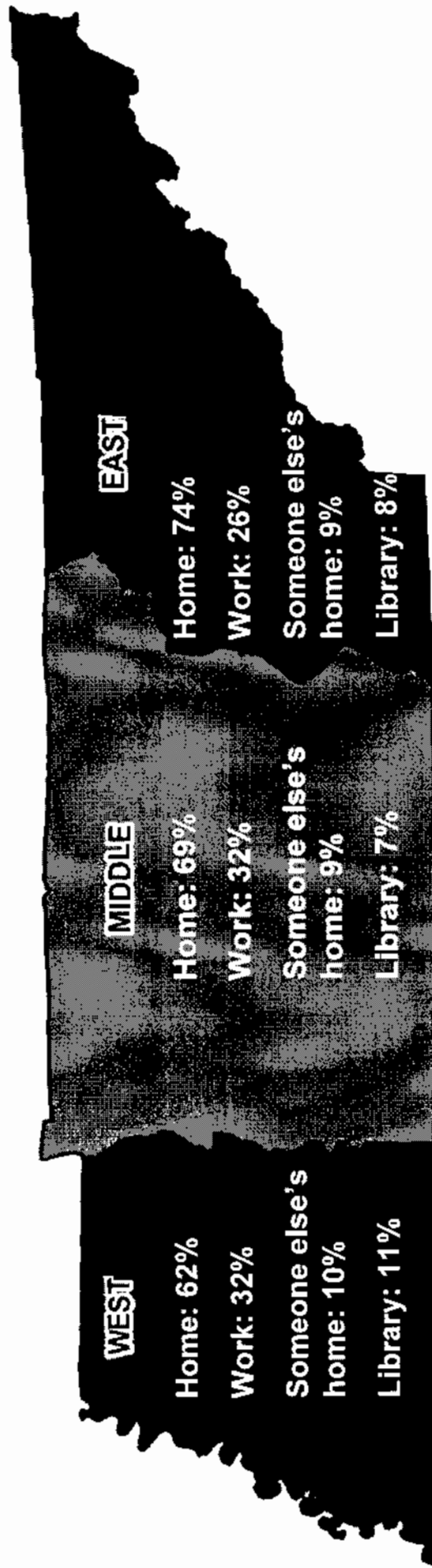
Source: 2007 Connected Tennessee Residential Technology Assessment



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Where Tennessee Residents Use the Internet (by Grand Division)

Percent of Tennessee residents who access the Internet:



Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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Top Ten Internet Applications

West
1. Sending e-mail
2. Researching products
3. Using a search engine
4. Purchasing products
5. Searching for health or medical information
6. Sending or receiving photos
7. Researching or booking travel
8. Reading news online
9. Searching for community event information
10. Online Banking

Middle
1. Sending e-mail
2. Using a search engine
3. Researching products
4. Purchasing products
5. Sending or receiving photos
6. Researching or booking travel
7. Reading news online
8. Searching for health or medical information
9. Searching for community event information
10. Online Banking

East
1. Sending e-mail
2. Using a search engine
3. Researching products
4. Purchasing products
5. Searching for health or medical information
6. Sending or receiving photos
6. Researching or booking travel
7. Reading news online
9. Searching for community event information
10. Online Banking

Q: Which of the following activities do you conduct on the Internet?

(n = 7,167 TN residents with Internet service at home)

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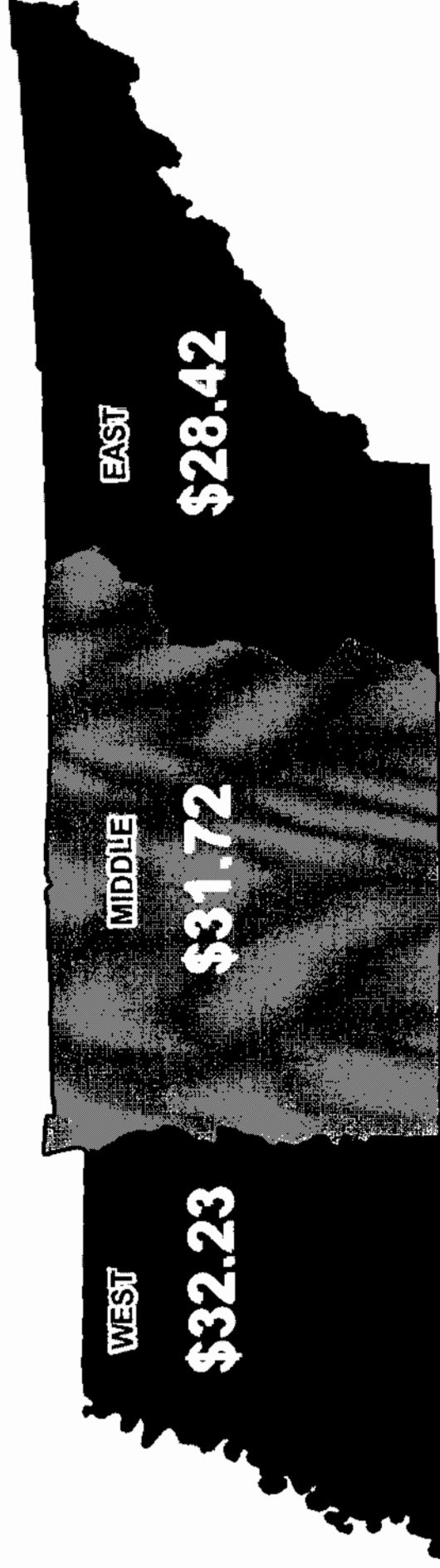
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How Much Tennessee Residents Pay for their Internet Service (by Grand Division)

Average monthly price Tennessee residents pay for home Internet service:



**Statewide Average: Tennessee residents report paying
an average of \$30.61 per month.**

Q: What do you pay each month for your Internet service?
(n = 6,191 TN residents with Internet service at home)
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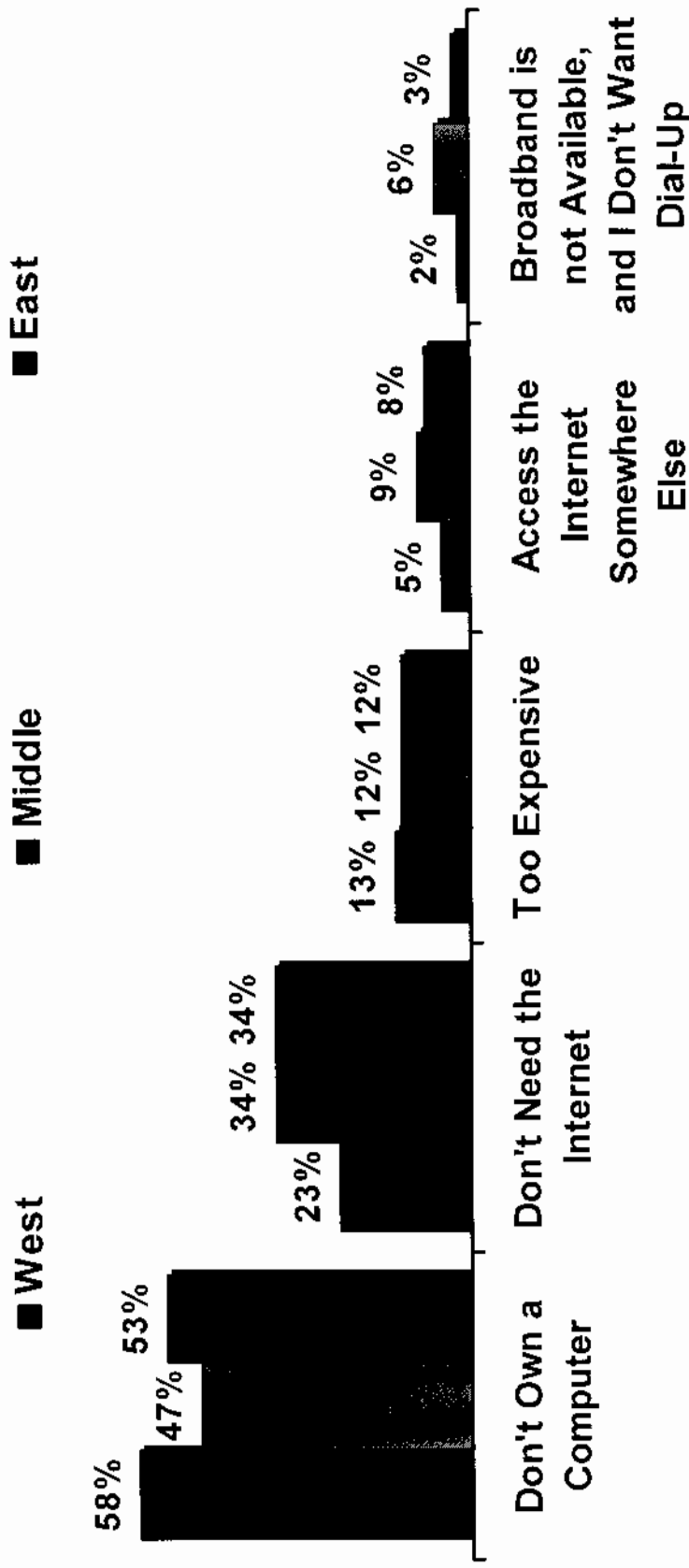
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Barriers to Internet Adoption (by Grand Division)

Percent of Tennessee residents who do not have an Internet connection for the following reasons:



Q: Why don't you subscribe to the Internet at home?

(n = 3,237 TN residents without Internet service at home)

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Tennessee Residents That Have Broadband in their Household (by Grand Division)

Percent of Tennessee residents who use broadband from home:



**Statewide Average: 43% of all Tennessee residents
have a broadband connection at home.**

Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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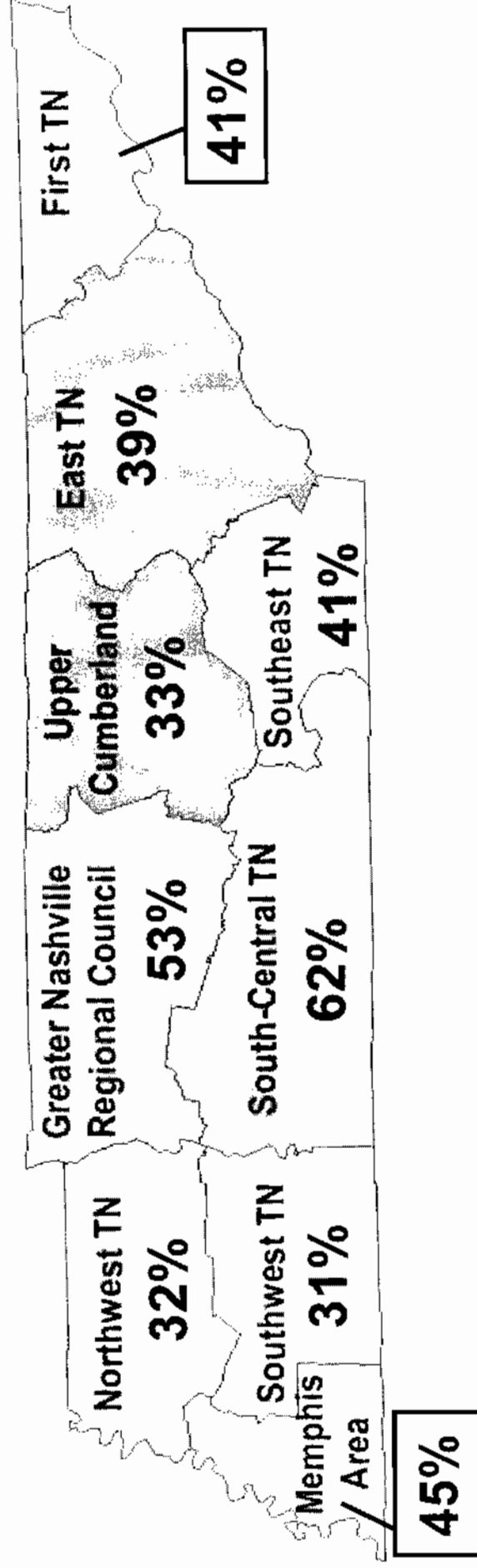
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Tennessee Residents That Have Broadband in their Household (by Area Development District)

Percent of Tennessee residents who have a broadband connection at home:



**Statewide Average: 43% of all Tennessee residents use
broadband from home.**

Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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2007 TENNESSEE RESIDENTIAL BROADBAND TECHNOLOGY ASSESSMENT

Compared to Statewide Average

- Significantly Lower (<26%)
- Lower (27-42%)
- Statewide Average (43%)
- Higher (44-55%)
- Significantly Higher (>55%)

Broadband Adoption Statewide: 43%

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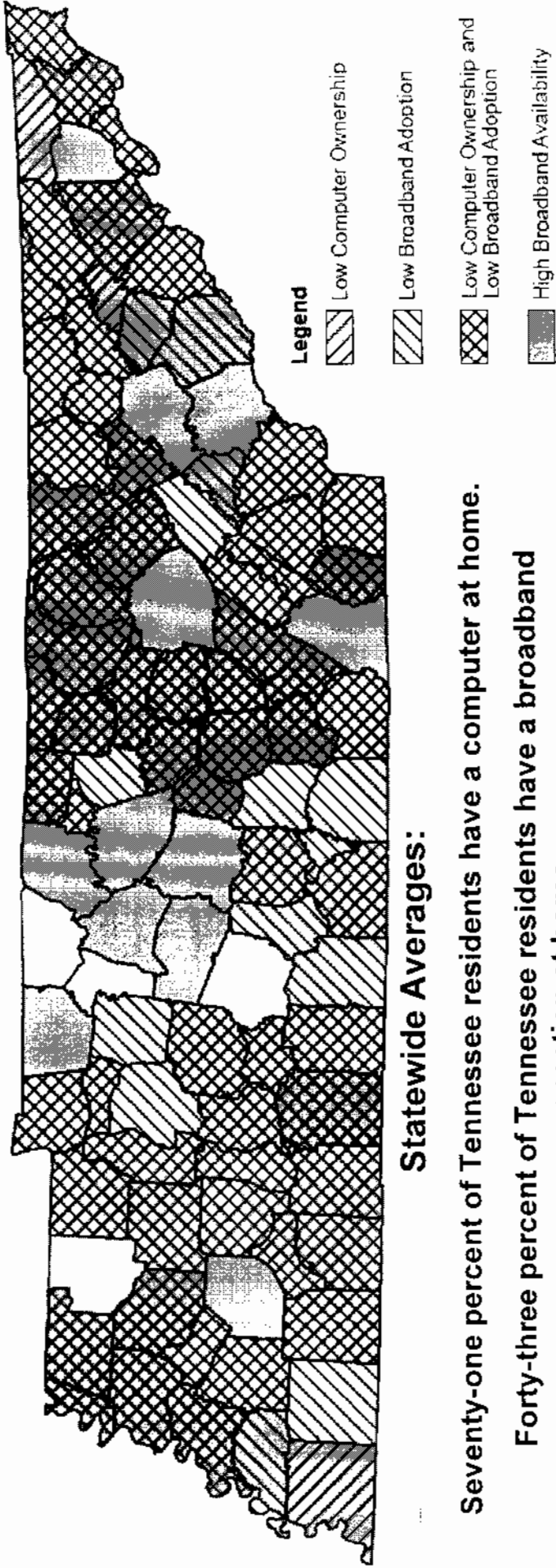
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Broadband Availability vs. Computer Ownership and Broadband Adoption

BROADBAND AVAILABILITY VS.
COMPUTER OWNERSHIP AND BROADBAND ADOPTION



Statewide Averages:

Seventy-one percent of Tennessee residents have a computer at home.

Forty-three percent of Tennessee residents have a broadband connection at home.

Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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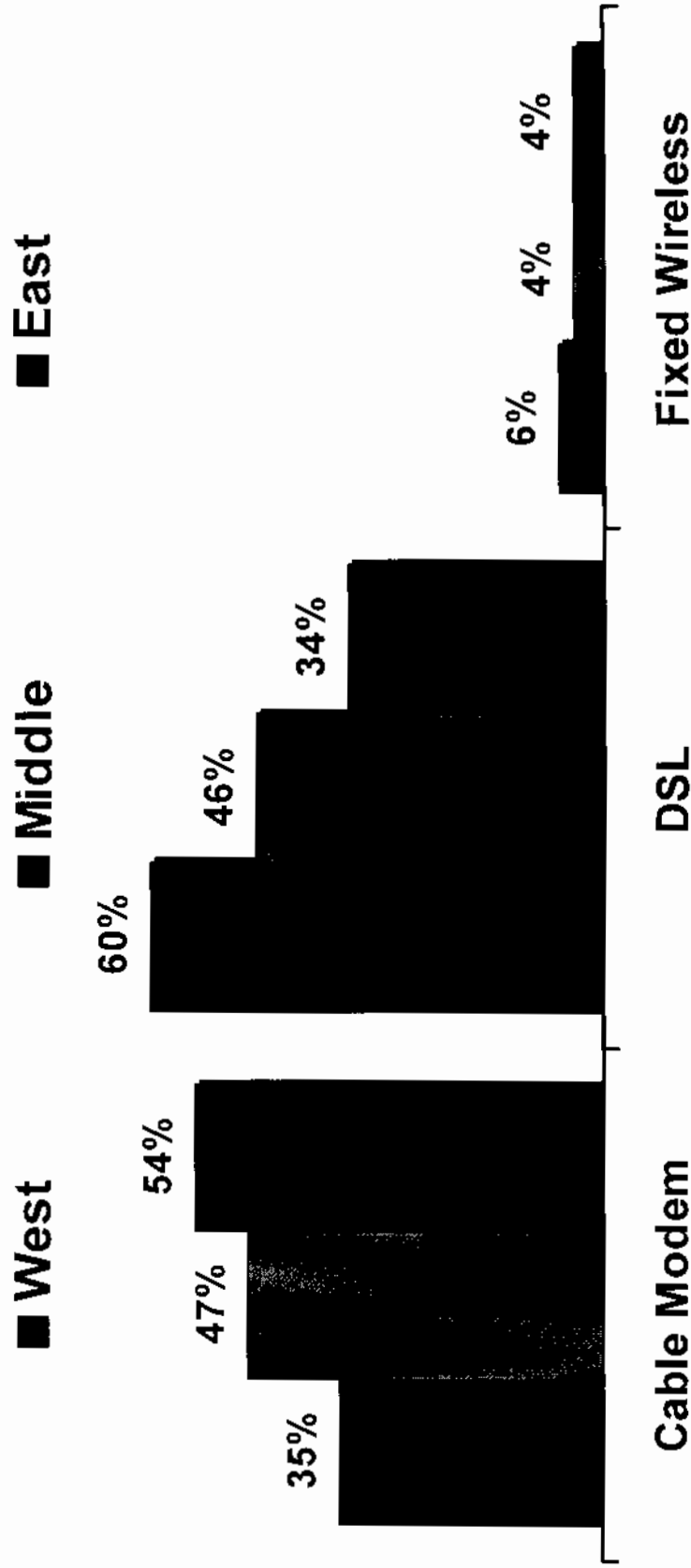
Source: 2007 Connected Tennessee Residential Technology Assessment



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Top Methods of Broadband Access (by Grand Division)

Percent of Tennessee residents with a broadband connection at home:



Cable Modem

DSL

Fixed Wireless

Q: Which of the following describes the broadband service you have at home?

(n = 4,035 TN residents with broadband service at home)

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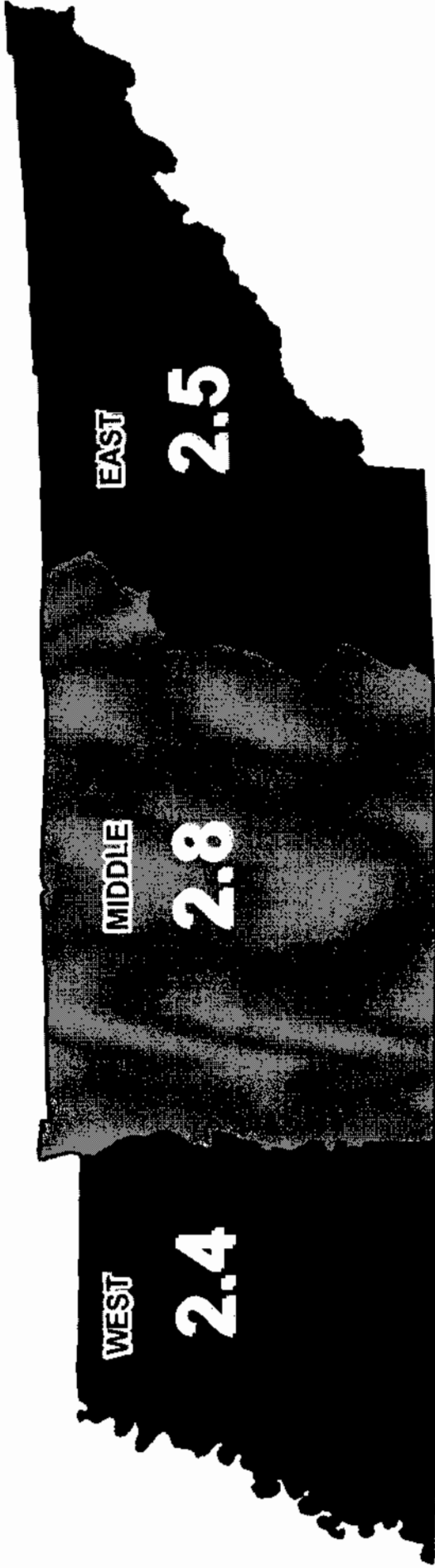
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How Long Tennessee Residents Have Had Broadband in their Household (by Grand Division)

Average number of years Tennessee residents have accessed broadband from home:



**Statewide Average: Tennessee residents adopted
broadband 2.6 years ago on average.**

Q: When did you subscribe to broadband service?

(n = 4,053 TN residents with broadband service at home)

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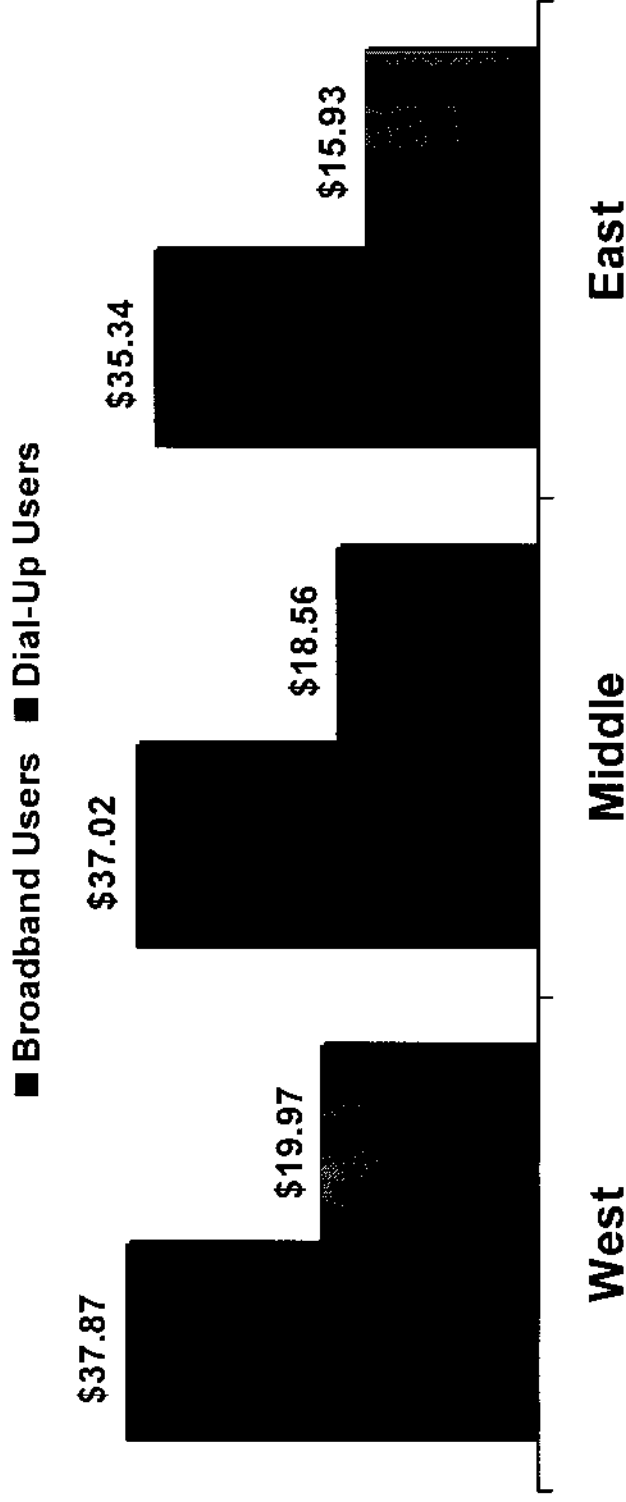
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How Much Tennessee Residents Pay for Home Internet Service (by Grand Division)

Average monthly cost that Tennessee residents pay for broadband and dial-up connections at home:



Statewide Average: Tennessee residents pay an average of \$36.65 per month for home broadband access and \$17.82 for dial-up.

Q. What do you pay each month for your Internet service?

(n = 6,191 TN residents with either broadband or dial-up service at home)

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Average monthly cost that Tennessee residents pay for broadband access at home:



Q: What do you pay each month for your Internet service?
(*n* = 4,053 TN residents with broadband service at home)

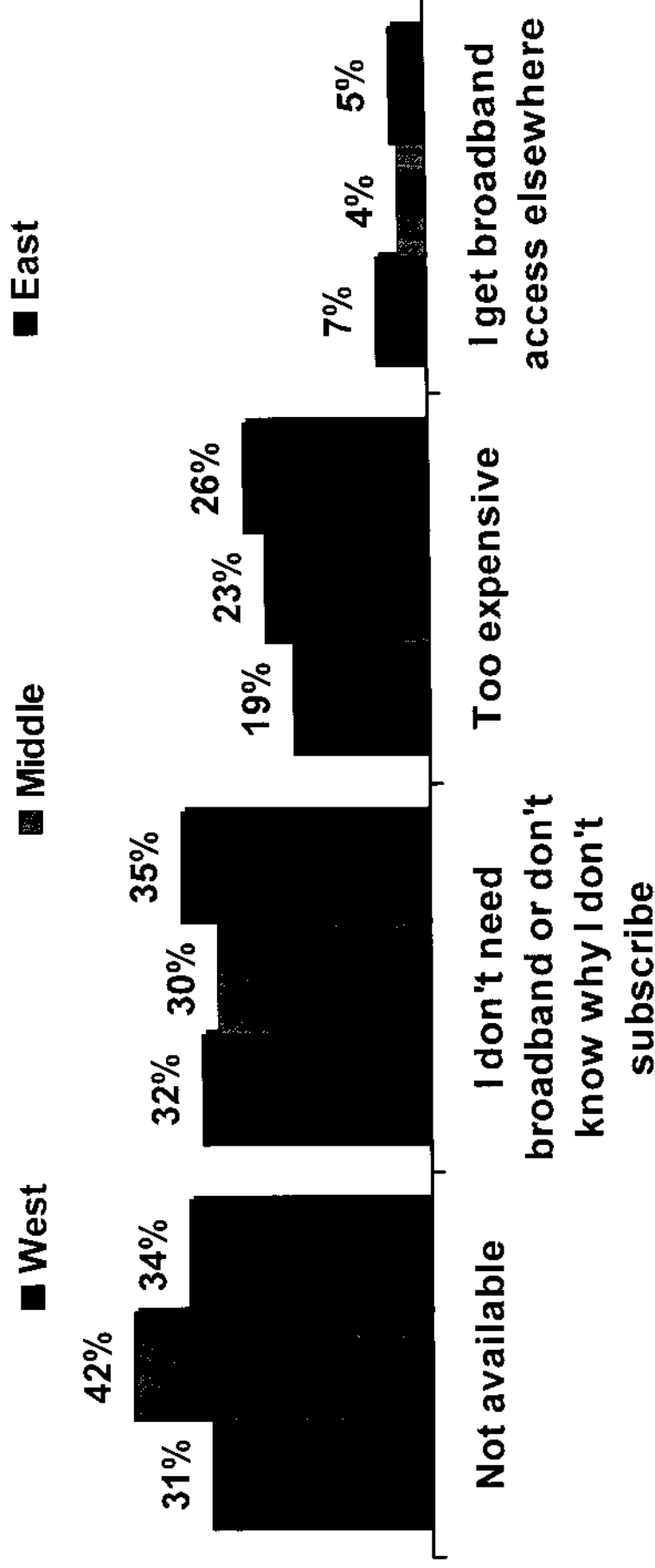
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Top Barriers to Broadband Adoption Among Dial-up Users (by Grand Division)

Percent of Tennessee residents who rely exclusively on dial-up for home Internet service:



Q: Why don't you subscribe to broadband at home?

(n = 1,787 TN residents with dial-up service at their household)

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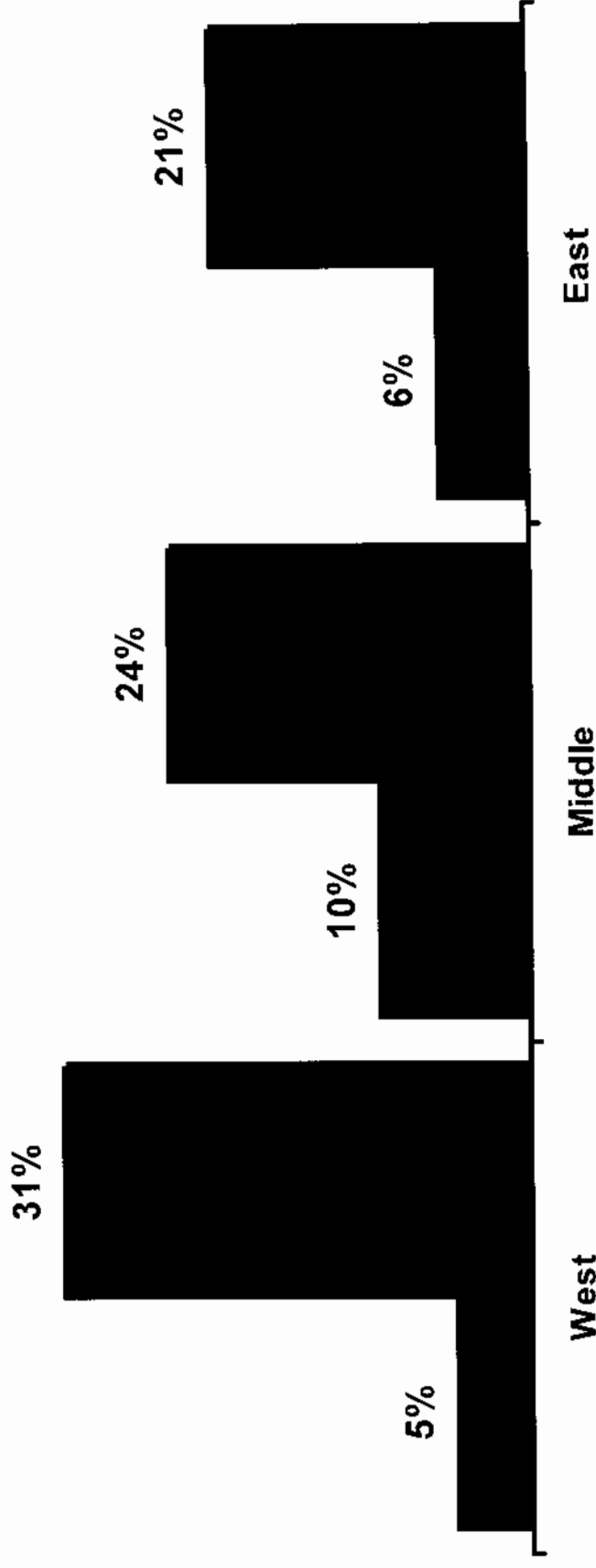
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Tennessee Residents and Telework (by Grand Division)

Percent of Tennessee residents employed full or part time who:

■ Regularly telework now

■ Would telework if allowed



Q. Do you regularly work from home through a broadband connection, commonly known as teleworking?

(n = 5,487 TN residents employed full or part time)

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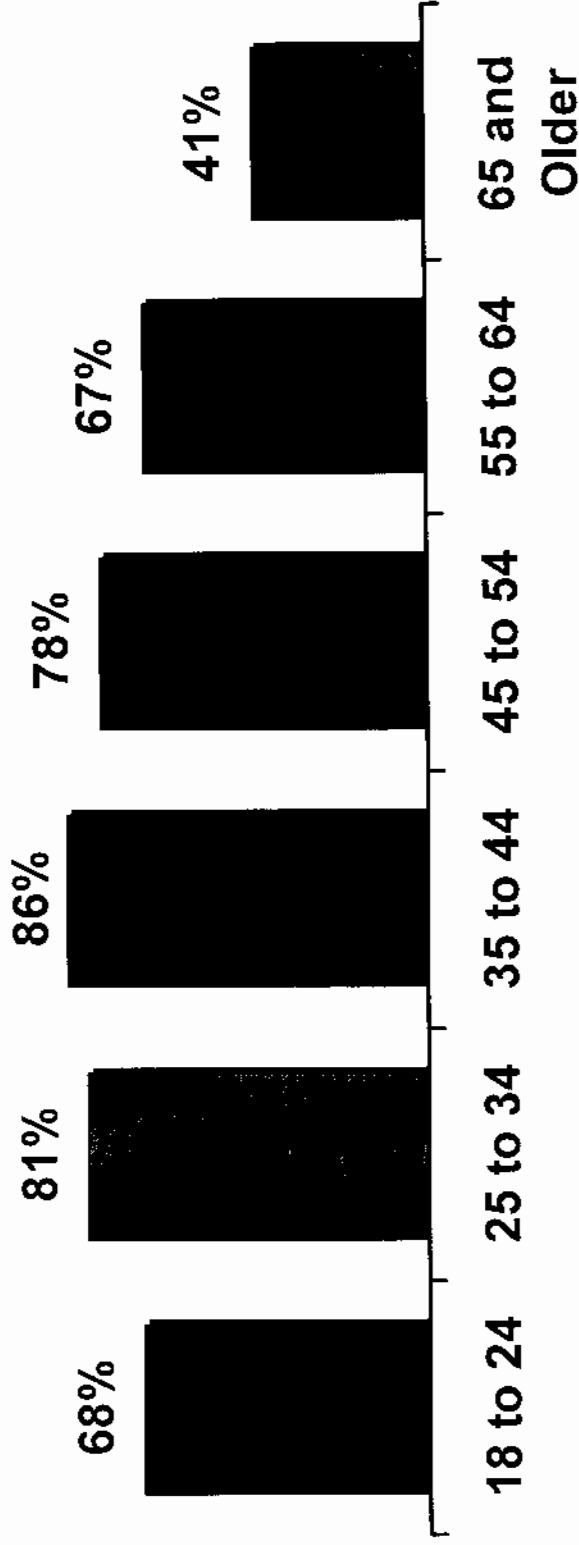
Residential Technology Assessment by Age



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Tennessee Residents with a Computer at Home

Percent of Tennessee residents who have a computer at home:



Statewide Average: 71% of Tennessee residents report having a personal computer at home.

Q: Does your household have a computer?
(n = 9,513 TN residents)
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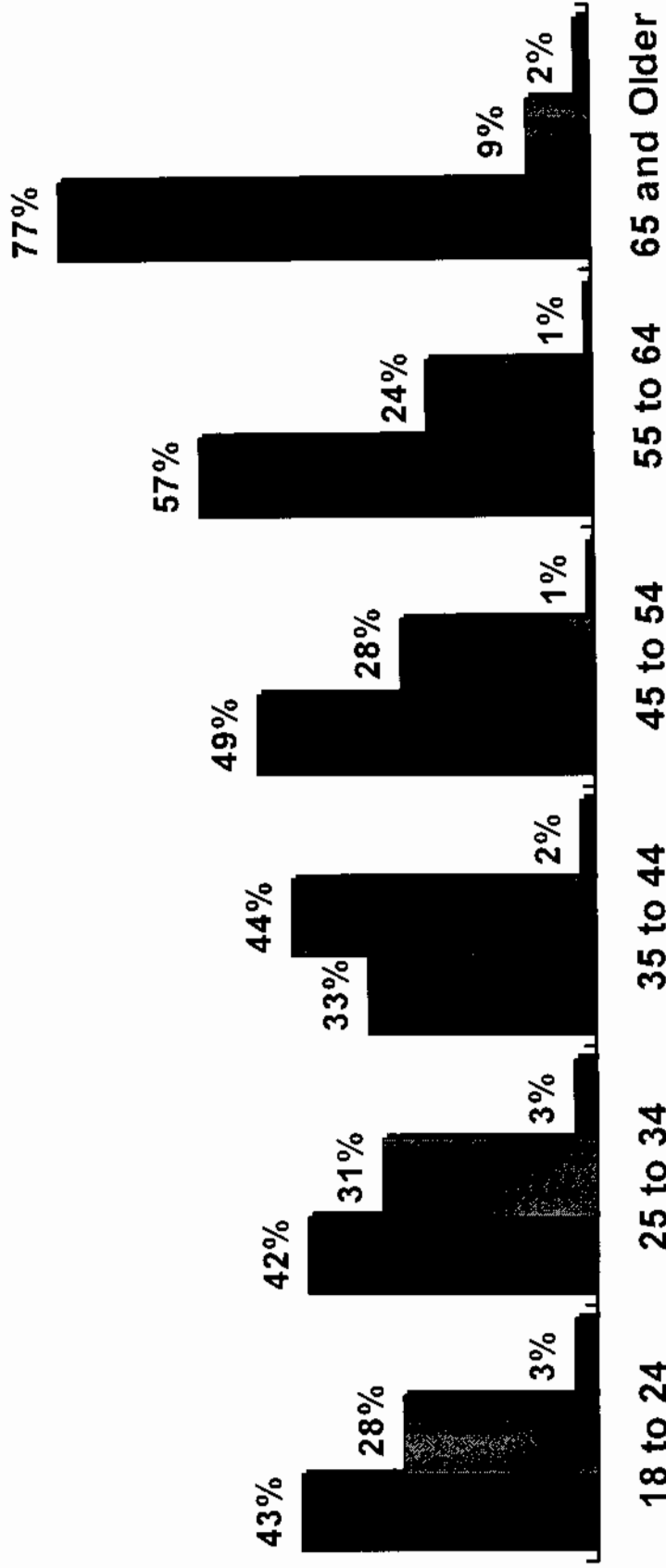


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Barriers to Computer Ownership

Top responses given when asked why Tennessee residents do not own a computer:

■ Don't need a Computer ■ Too Expensive ■ Don't Know / Refused



Q: Why don't you have a computer at home?

(n = 2,735 TN residents with no computer in their household)

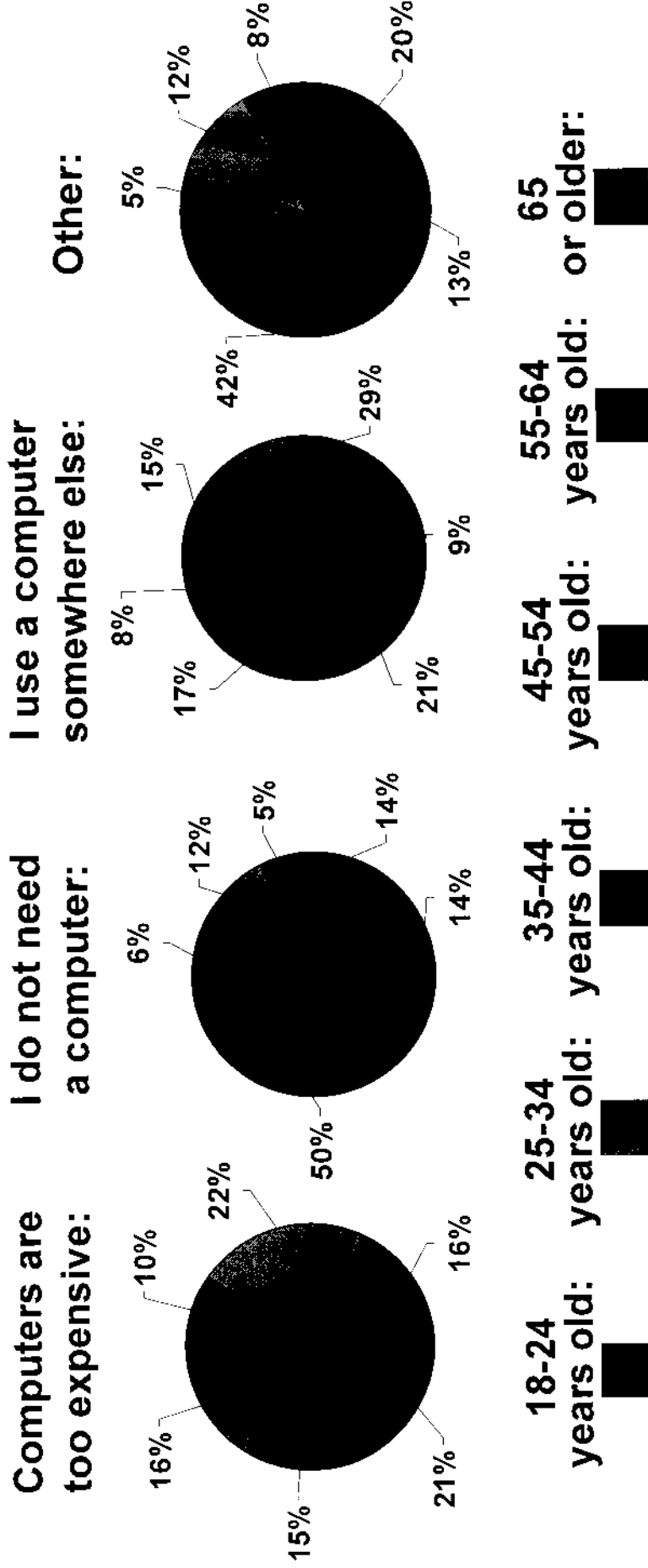
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Barriers to Computer Ownership

Age distribution of the top barriers to computer ownership:



Q: Why don't you have a computer at home?

(n = 2,735 TN residents with no computer in their household)

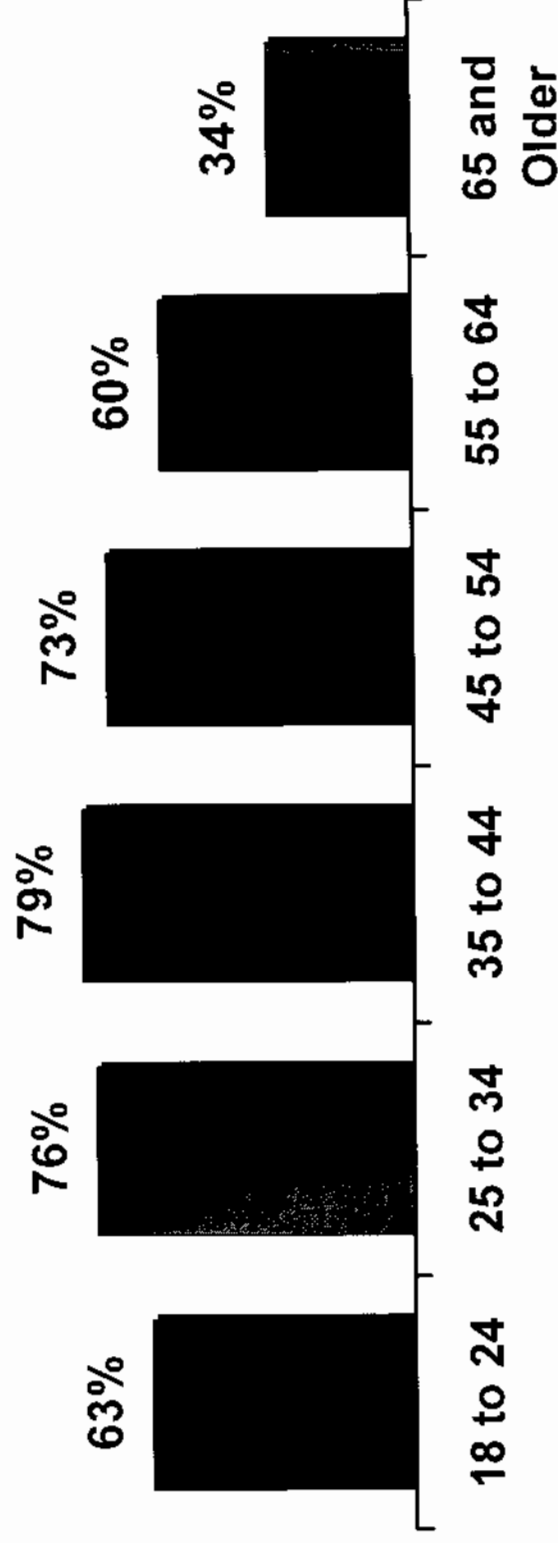
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Tennessee Residents with an Internet Connection at Home

Percent of Tennessee residents who access the Internet from home:



**Statewide Average: 65% of Tennessee residents report using the
Internet from home.**

Q: Do you have an Internet connection at home?

(n = 9,513 TN residents)

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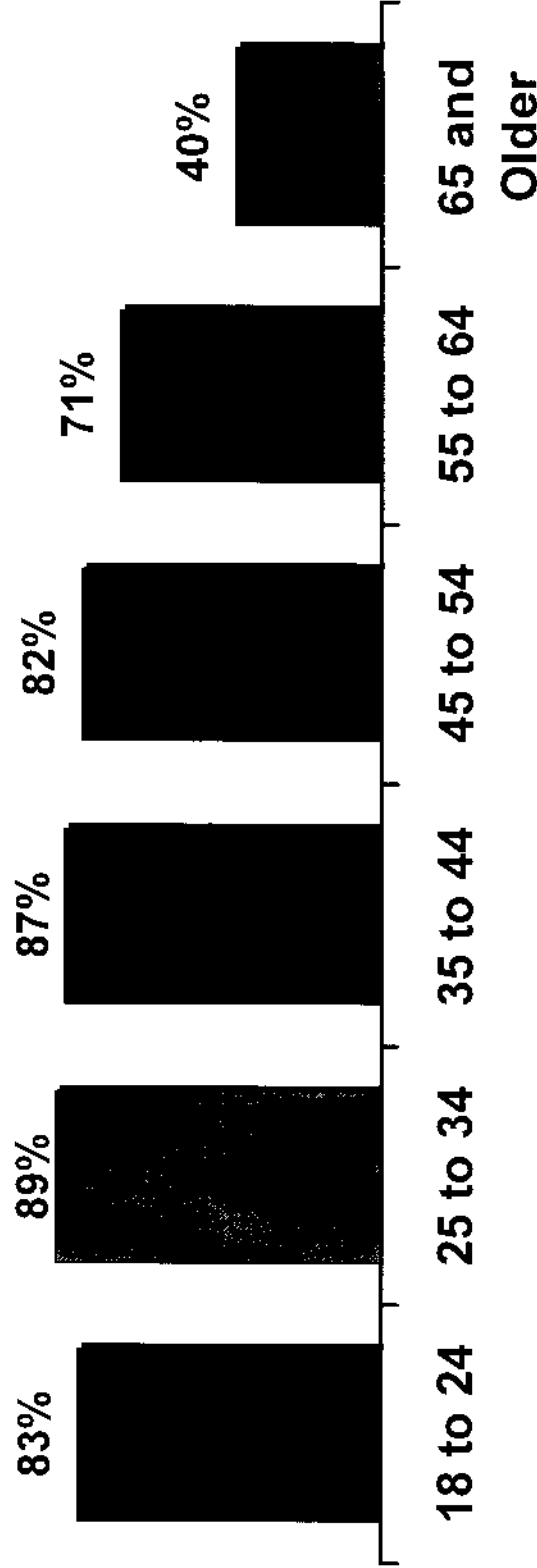
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Tennessee Residents Who Access the Internet from Home or Some Other Place

Percent of Tennessee residents who access the Internet from home or some other place:



Statewide Average: 75% of Tennessee residents report using the Internet at home or someplace else.

Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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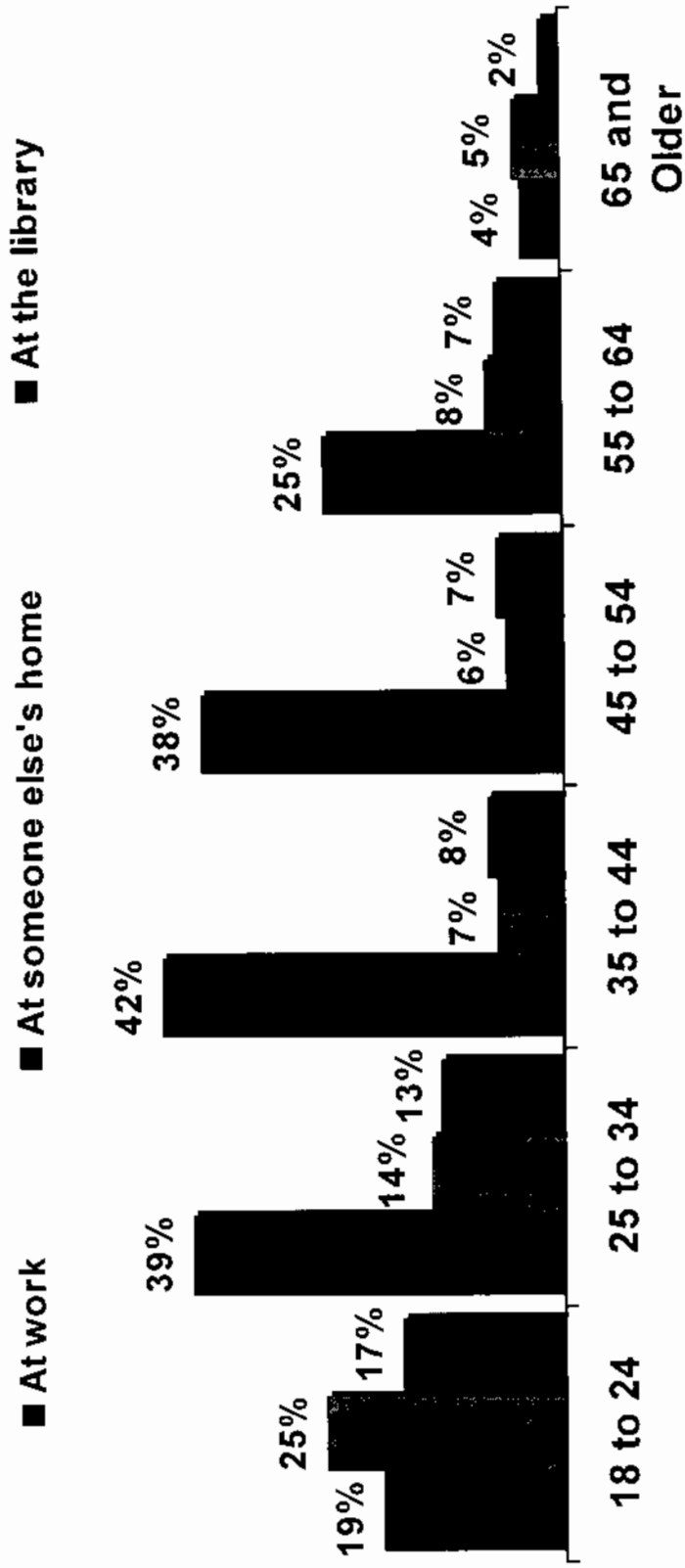
Source: 2007 Connected Tennessee Residential Technology Assessment



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Most Popular Places For Tennessee Residents to Access the Internet

Percent of Tennessee residents who access the Internet someplace other than home:



Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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Most Popular Internet Applications

Percent of Tennessee residents who have Internet service and use the following applications:

Percentage is significantly higher than the state average: ☐	18-24	25-34	35-44	45-54	55-64	65 +
Percentage is significantly lower than the state average: ☒						
Sending e-mail	71%	73%	64%	63%	58%	53%
Using a search engine	54%	63%	55%	56%	41%	34%
Researching a product online	49%	61%	55%	55%	41%	40%
Purchasing a product online	44%	61%	54%	44%	42%	31%
Researching or booking travel	39%	53%	51%	42%	39%	28%
Sending or receiving photos	49%	55%	47%	42%	33%	30%
Searching for health or medical information	36%	49%	48%	45%	41%	34%
Reading online newspapers or other news sources	43%	51%	48%	42%	38%	27%
Searching for information about events in your community	37%	50%	41%	38%	29%	22%
Online Banking	30%	53%	39%	38%	23%	22%

Shading indicates that a value is either significantly higher (green) or lower (pink) than the Tennessee state average (significance measured at a 95% confidence level)

Q: Which of the following activities do you conduct on the Internet?

(n = 7,167 TN residents with Internet service at home)

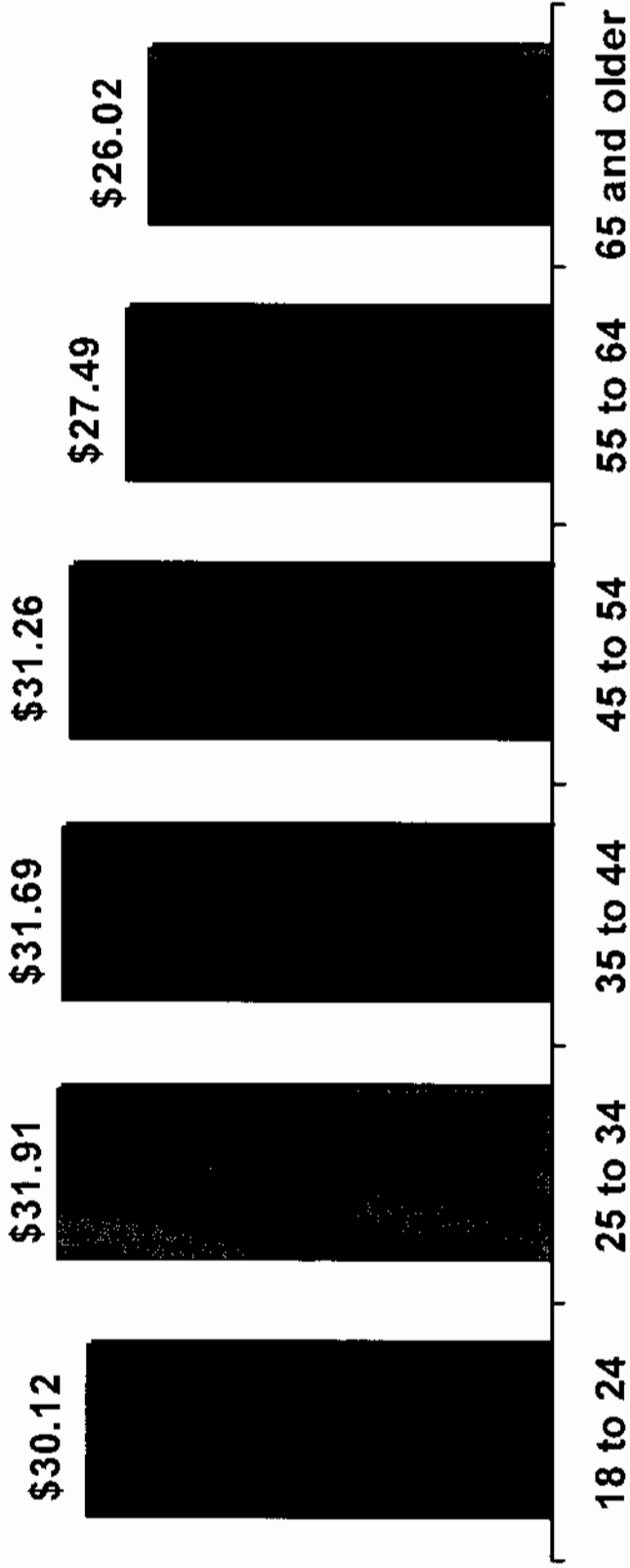
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How Much Tennessee Residents Pay for their Internet Service

Average price Tennessee residents pay per month for home Internet service:



**Statewide Average: Tennessee residents report paying an average
of \$30.61 per month.**

Q. What do you pay each month for your Internet service?

(n = 6,191 TN residents with Internet service at home)

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Barriers to Internet Adoption

Percent of Tennessee residents who do not have the Internet for the following reasons:

Percentage is significantly lower than the state average: ■	18 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 and older
I don't own a computer	49%	52%	42%	60%	49%	53%
I don't need the Internet	21%	29%	31%	27%	35%	35%
Too expensive	15%	10%	16%	16%	12%	10%
I can get Internet access somewhere else	13%	12%	7%	7%	6%	2%
Broadband isn't available, and I don't want dial-up	5%	7%	9%	5%	2%	1%
Don't know/refused	1%	4%	1%	1%	0%	1%

Pink shading indicates that a value is significantly lower than the Tennessee state average (significance measured at a 95% confidence level)

Q. Why don't you subscribe to the Internet at home?

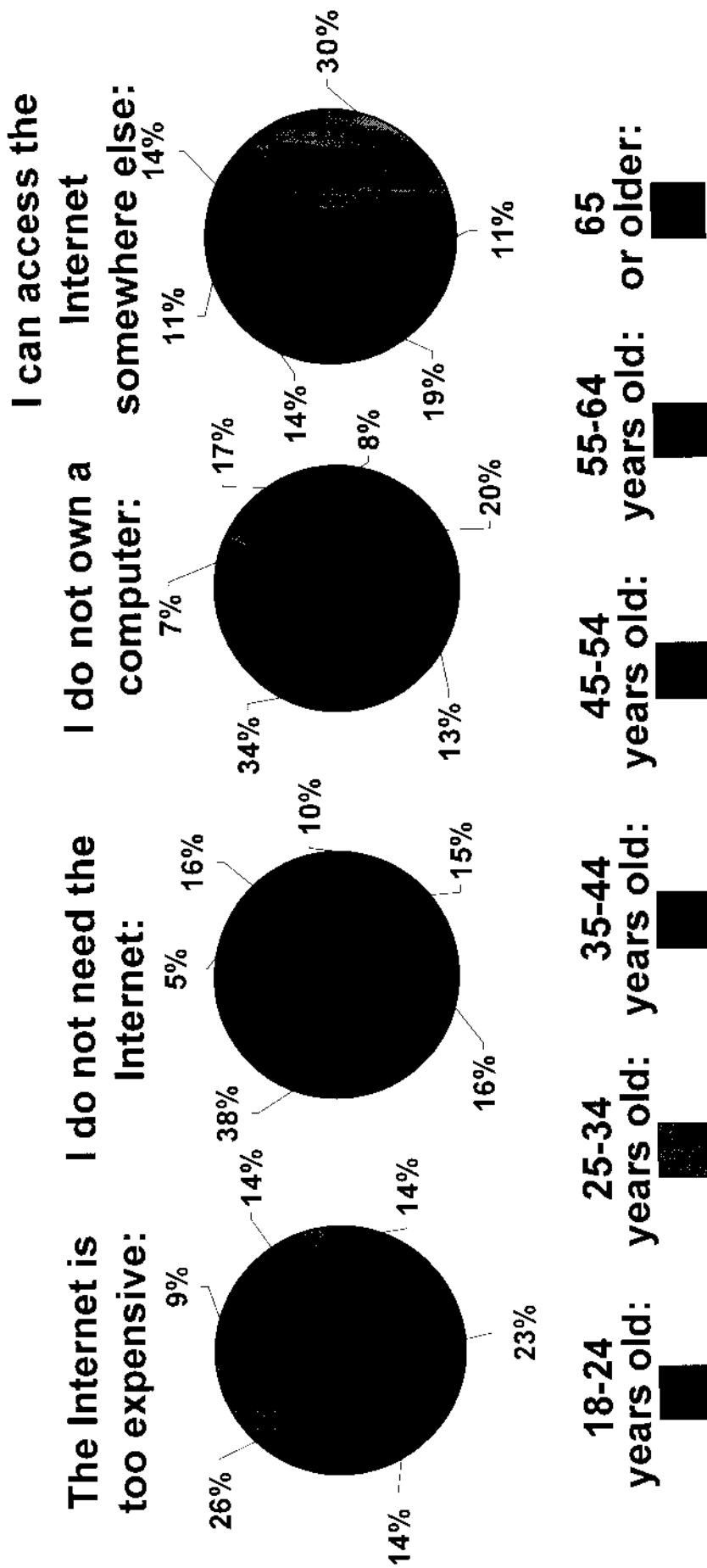
(n = 3,237 TN residents without an Internet connection at home)

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Barriers to Internet Adoption

Age distribution of the top barriers to Internet adoption:



Q: Why don't you subscribe to the Internet at home?

(n = 3,237 TN residents without Internet service at home)

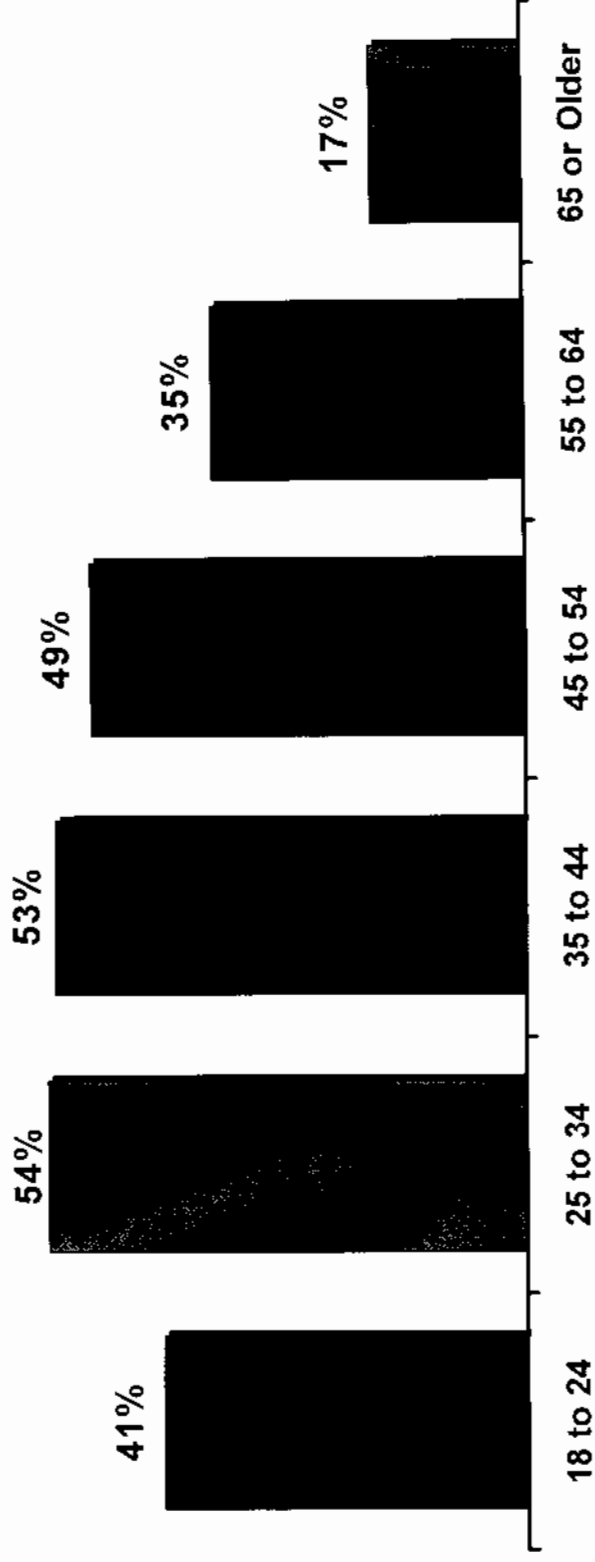
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Tennessee Residents That Have Broadband in their Household

Percent of Tennessee residents who access broadband from home:



**Statewide Average: 43% of all Tennessee residents have a
broadband connection at home.**

*Q: Which of the following describe the type of Internet service you
have at home?*

(n = 9,513 TN residents)

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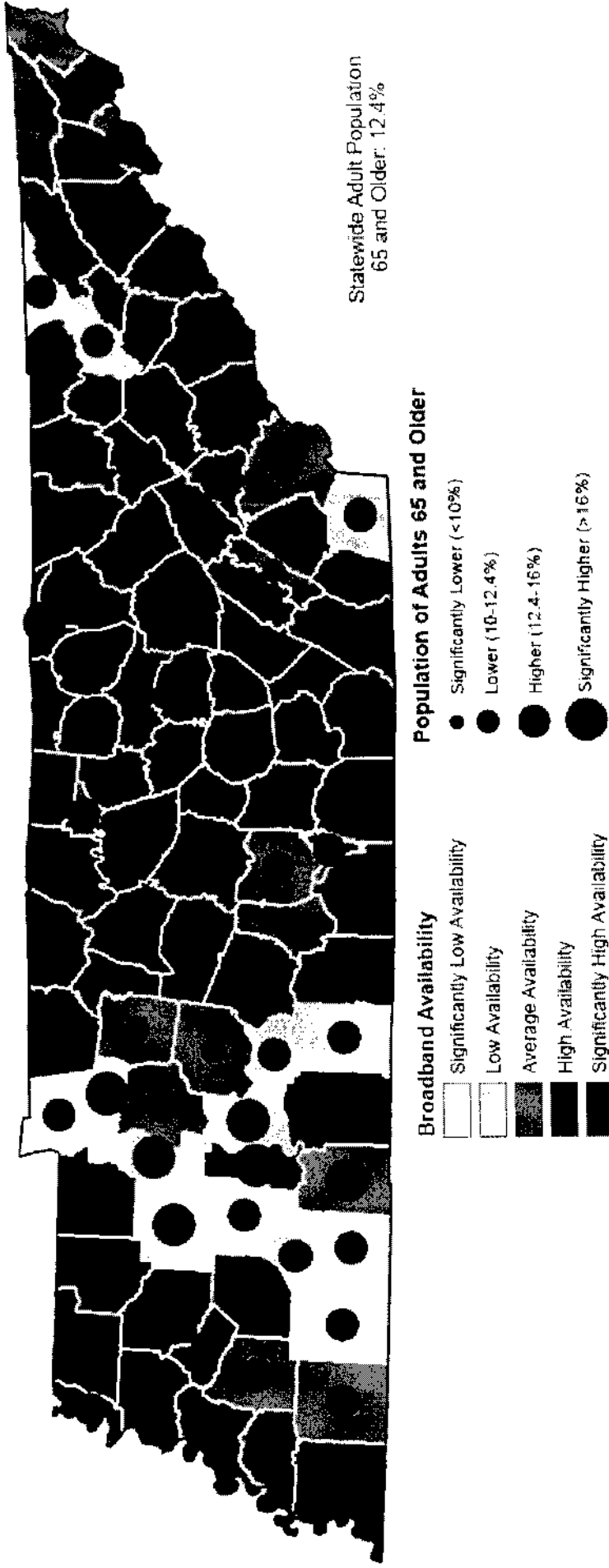
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Broadband Availability vs. Adult Population 65 and Older by County

BROADBAND AVAILABILITY VS. ADULT POPULATION 65 AND OLDER



Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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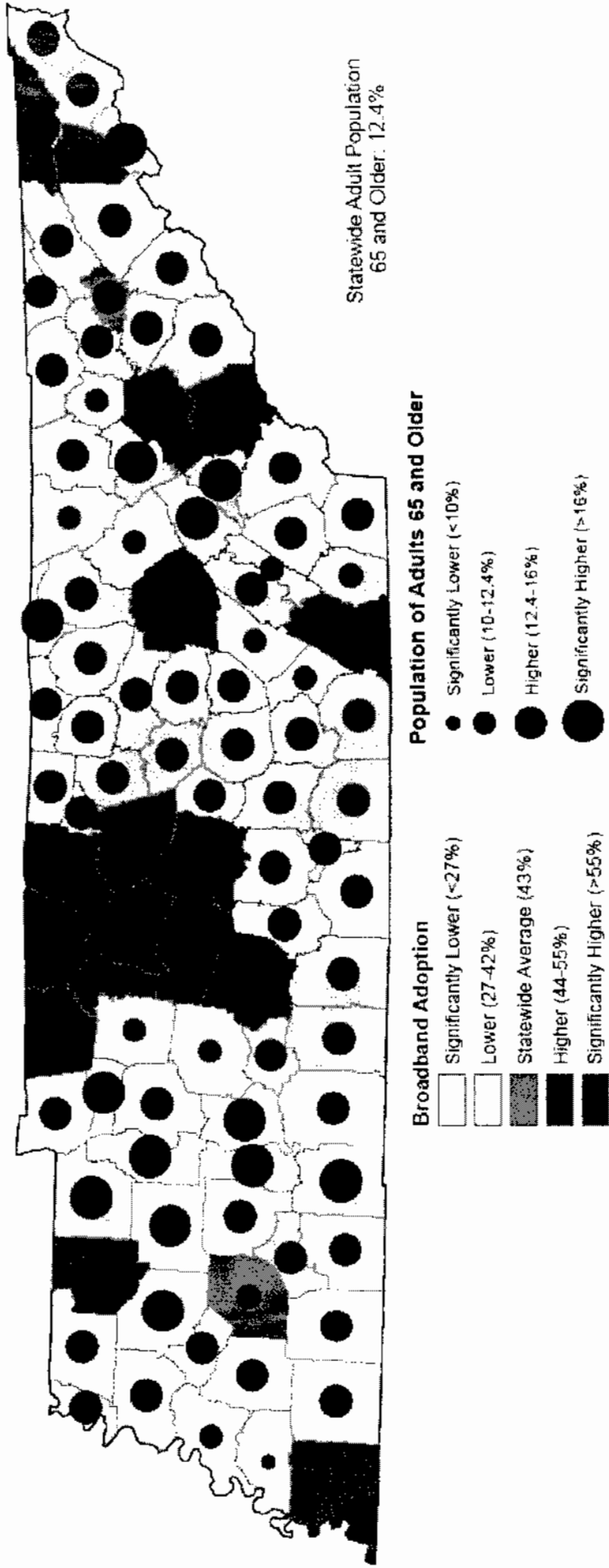
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Broadband Adoption vs. Adult Population 65 and Older by County

BROADBAND ADOPTION VS. ADULT POPULATION 65 AND OLDER



Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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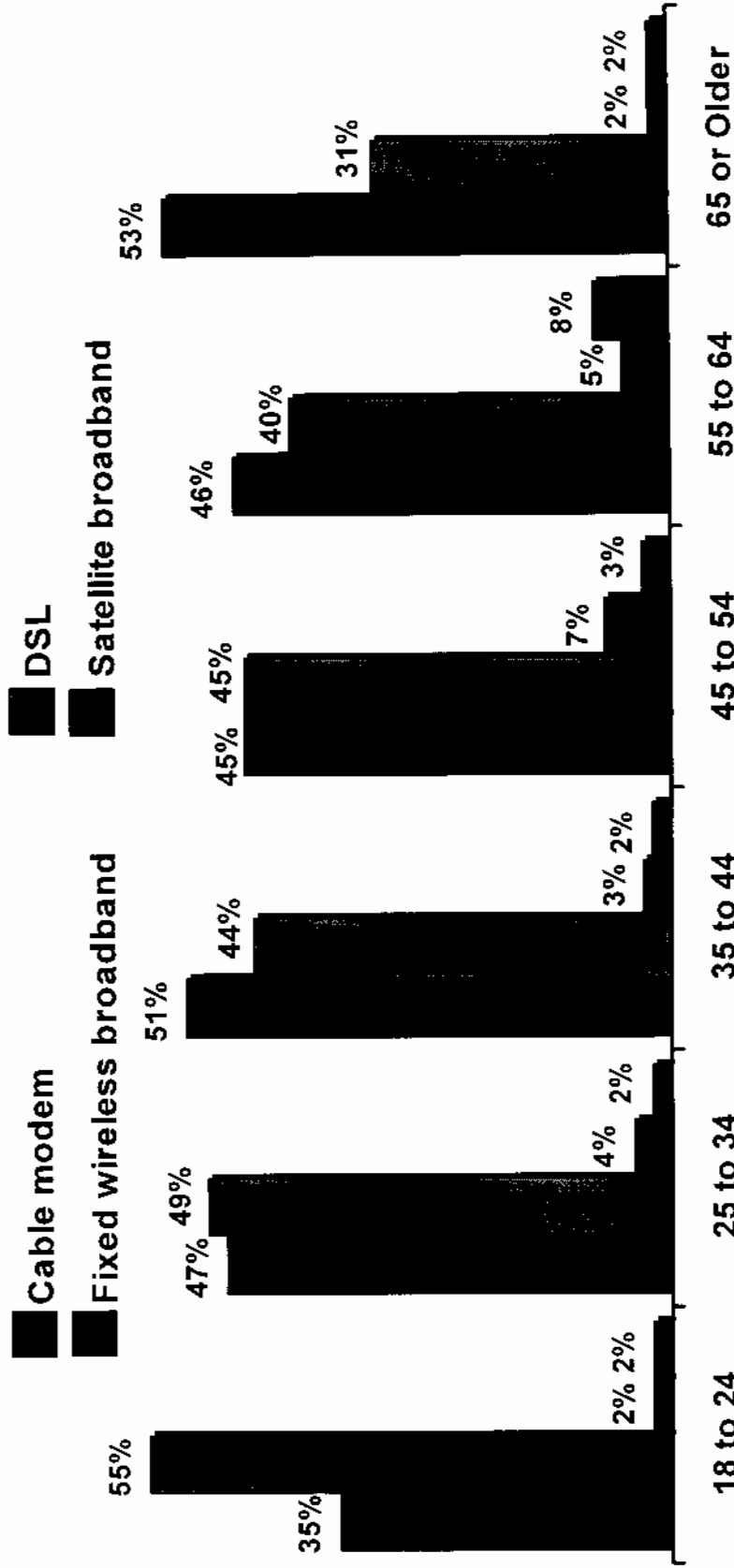


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Top Methods of Broadband Access

Percent of Tennessee residents who access broadband from home:



Q. Which of the following describes the broadband service you have at home?

(n = 4,035 TN residents with broadband service at home)

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How Long Tennessee Residents Have Had Broadband in their Household

Average number of years Tennessee residents have used broadband from home:



**Statewide Average: Tennessee residents adopted broadband 2.6
years ago on average.**

Q: When did you subscribe to broadband service?

(n = 4,053 TN residents with broadband service at home)

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How Much Tennessee Residents Pay for Internet

Average monthly cost that Tennessee residents pay for broadband and dial-up connections at home:

- I don't need a computer
- Use a Computer somewhere else
- Too expensive
- Don't know/refused



Statewide Average: Tennessee residents pay an average of \$36.65 per month for home broadband access and \$17.82 for dial-up.

Q: What do you pay each month for your Internet service?

(n = 6,191 TN residents with either broadband or dial-up service at home)

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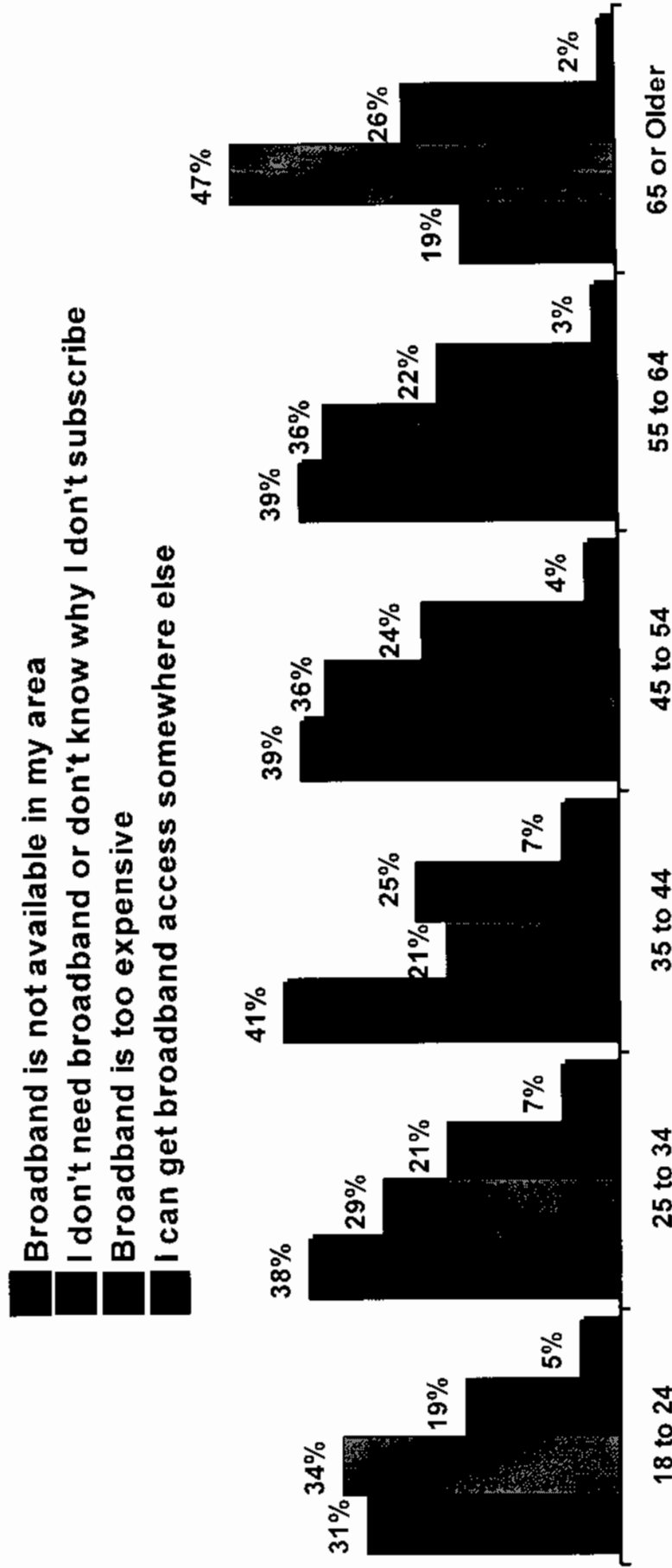
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Top Barriers to Broadband Adoption

Percent of Tennessee residents relying exclusively on dial-up service at home:



Q: Why don't you subscribe to broadband at home?

(n = 1,787 TN residents with dial-up Internet service at home)

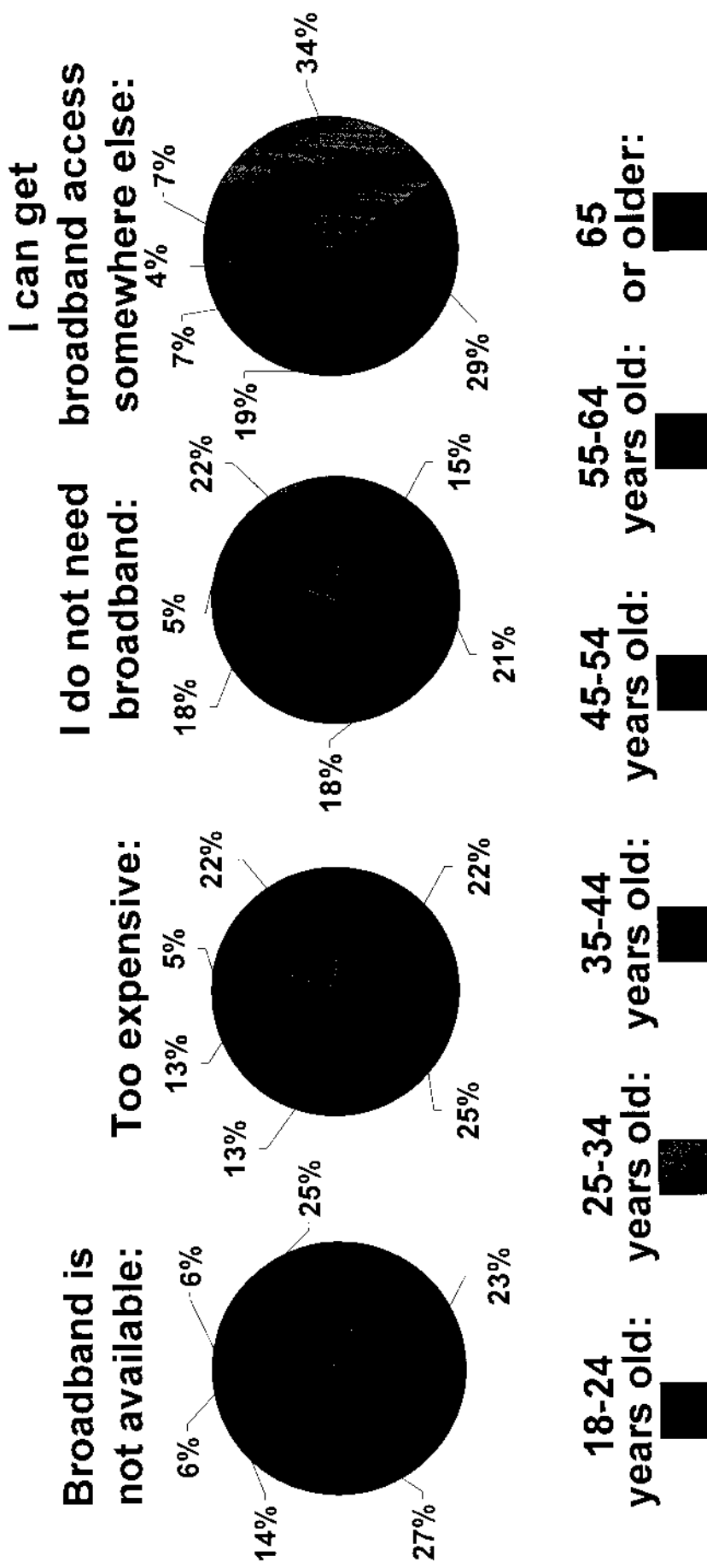
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Barriers to Broadband Adoption

Age distribution of the top barriers to broadband adoption:



Q: Why don't you subscribe to broadband at home?

(n = 1,787 TN residents with dial-up Internet service at home)

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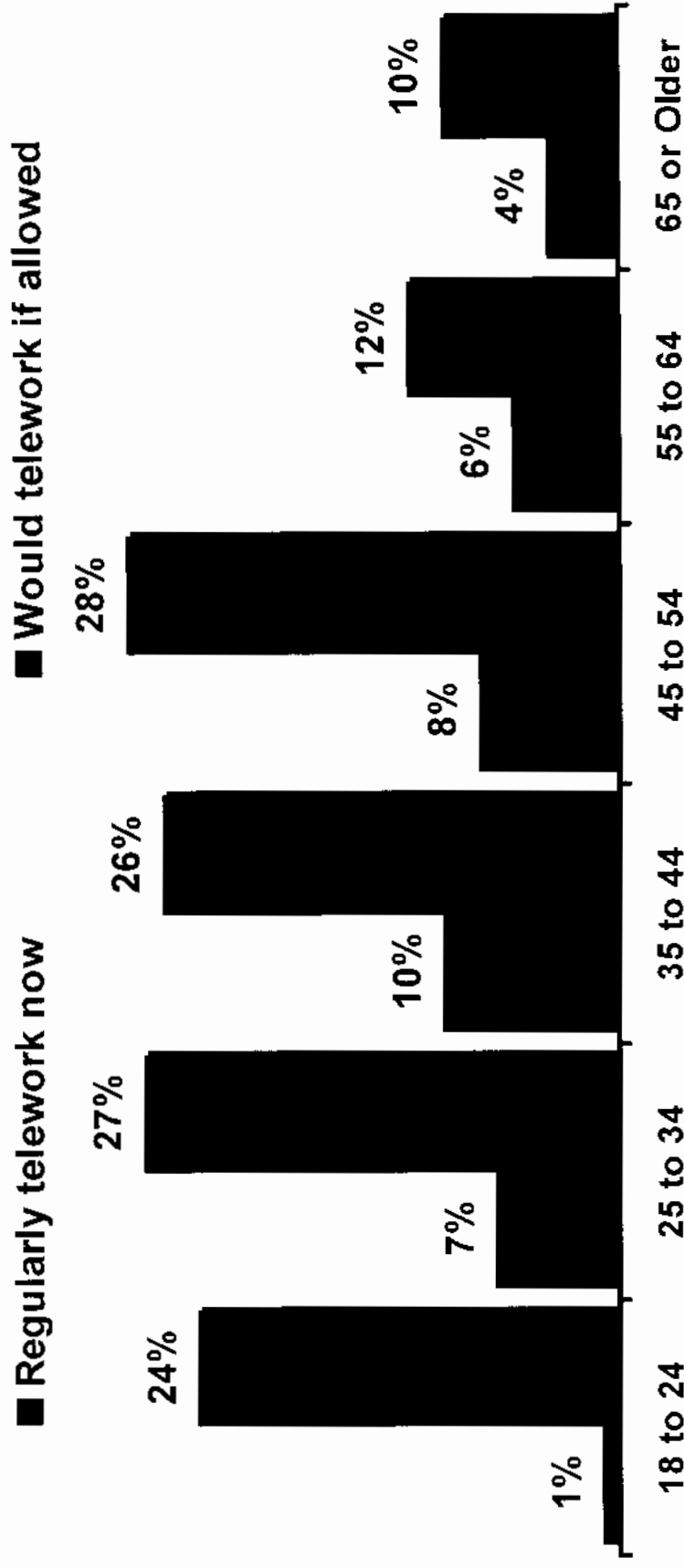
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Tennessee Residents and Telework

Percent of Tennessee residents employed full or part time who:



Q: Do you regularly work from home through a broadband connection, commonly known as teleworking?

(n = 5,487 TN residents employed full or part time)

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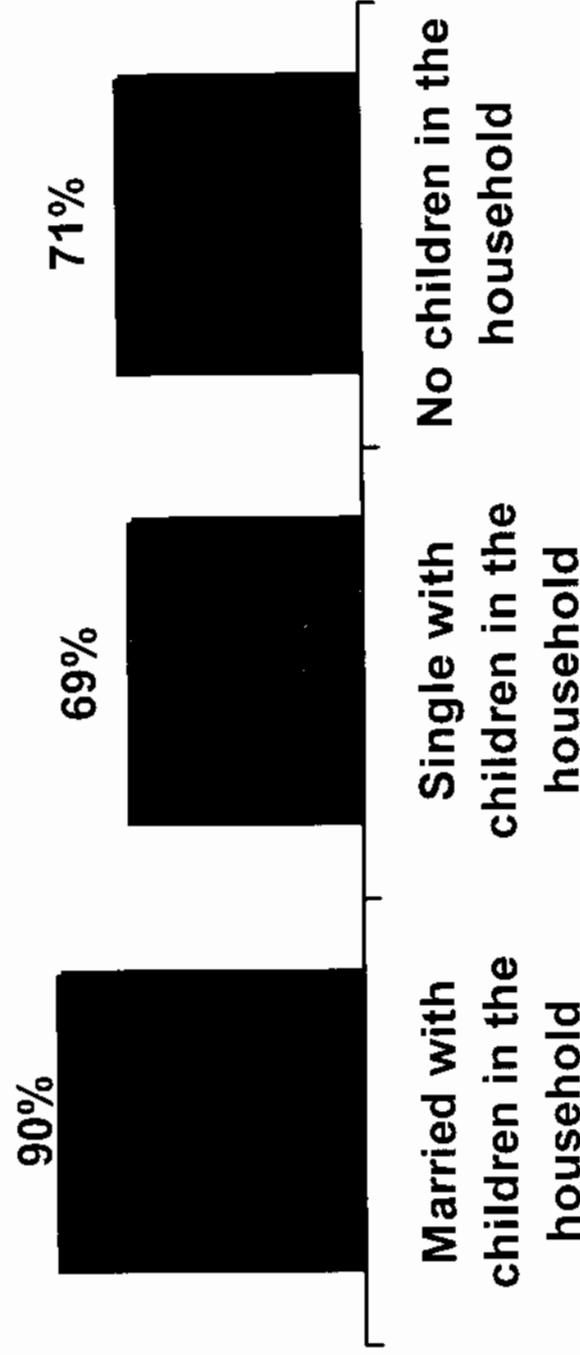
Residential Technology Assessment by the Presence of Children in the Household



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Tennessee Residents with a Computer at Home

Percent of Tennessee residents who have a computer at home:



Statewide Average: 71% of Tennessee residents report having a personal computer at home.

Q: Does your household have a computer?

(n = 9,513 TN residents)

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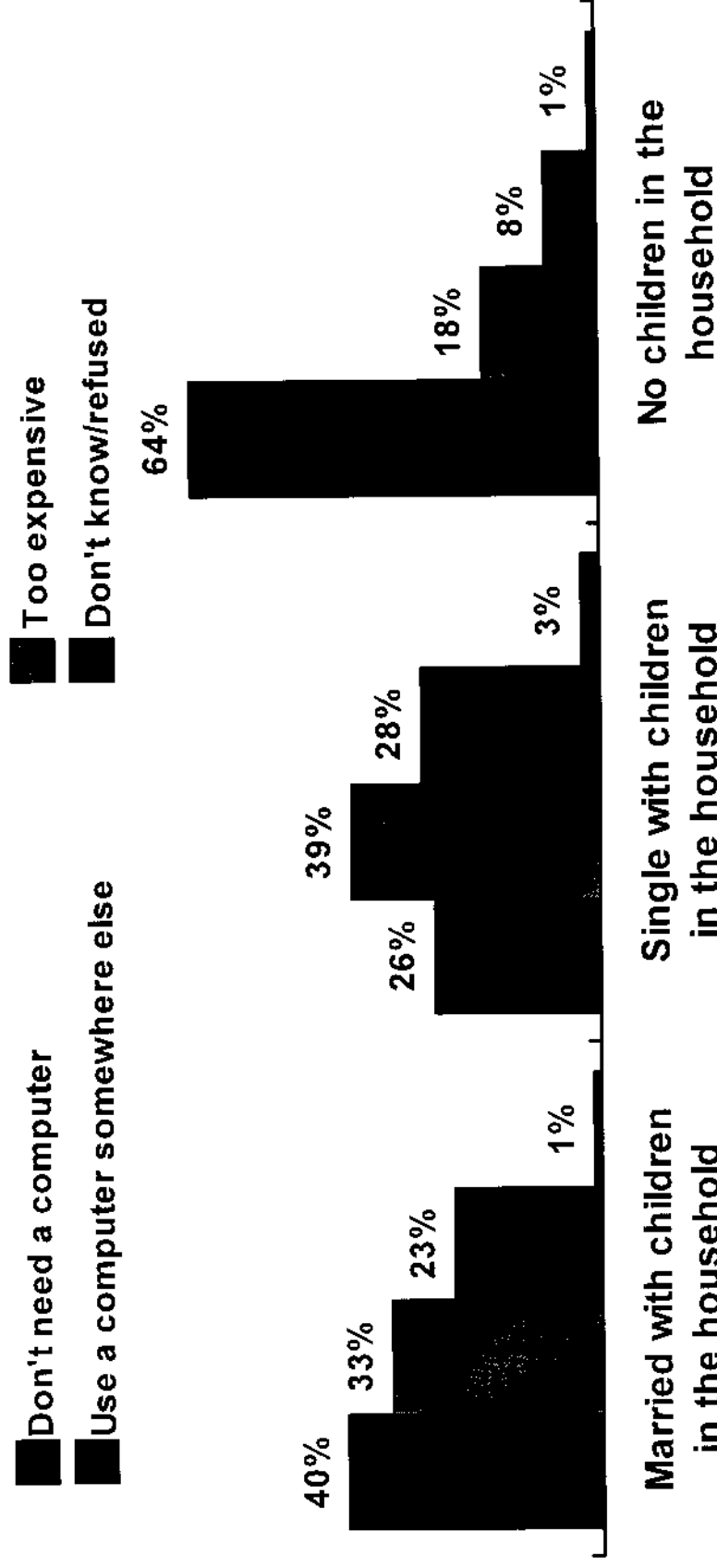
70

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Barriers to Computer Ownership

Top responses given when asked why Tennessee residents do not own a computer:



Q: Why don't you have a computer at home?

(n = 2,735 TN residents with no computer in their household)

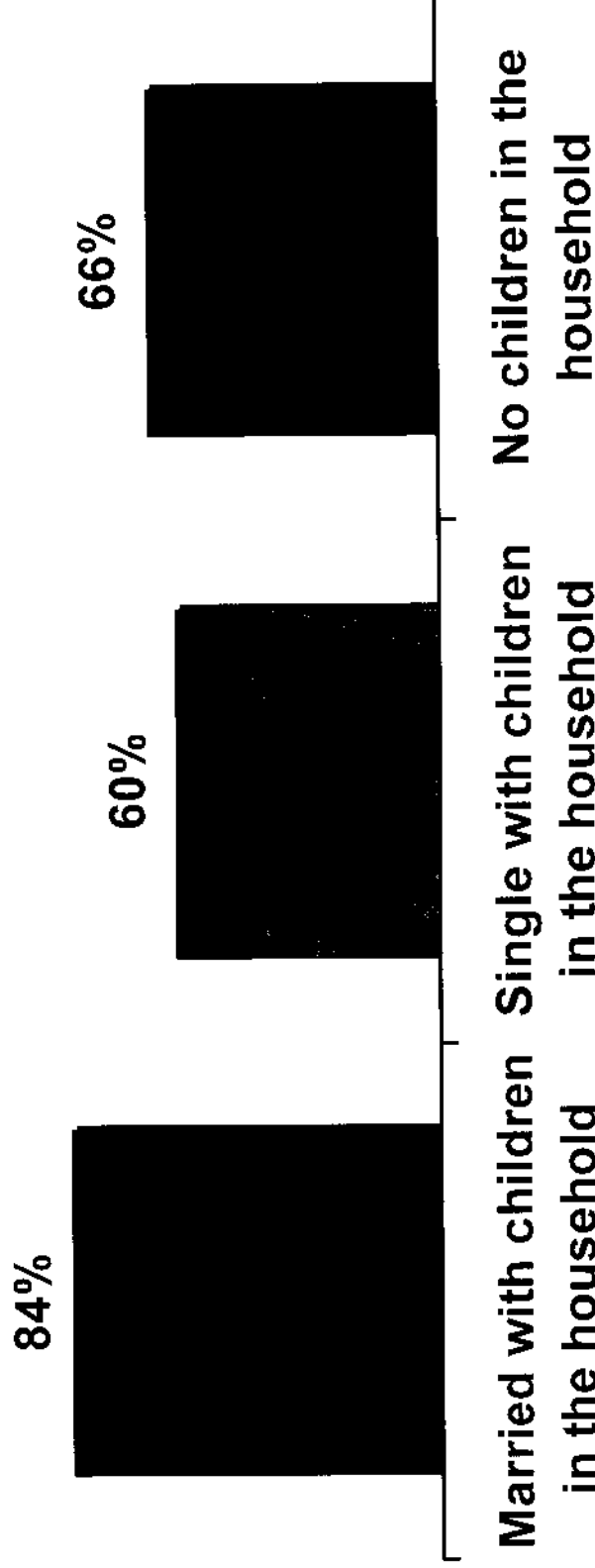
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Tennessee Residents who Access the Internet at Home

Percent of Tennessee residents who access the Internet from home:



Statewide Average: 65% of Tennessee residents report having an Internet connection at home.

Q. Do you have an Internet connection at home?

(n = 9,513 TN residents)

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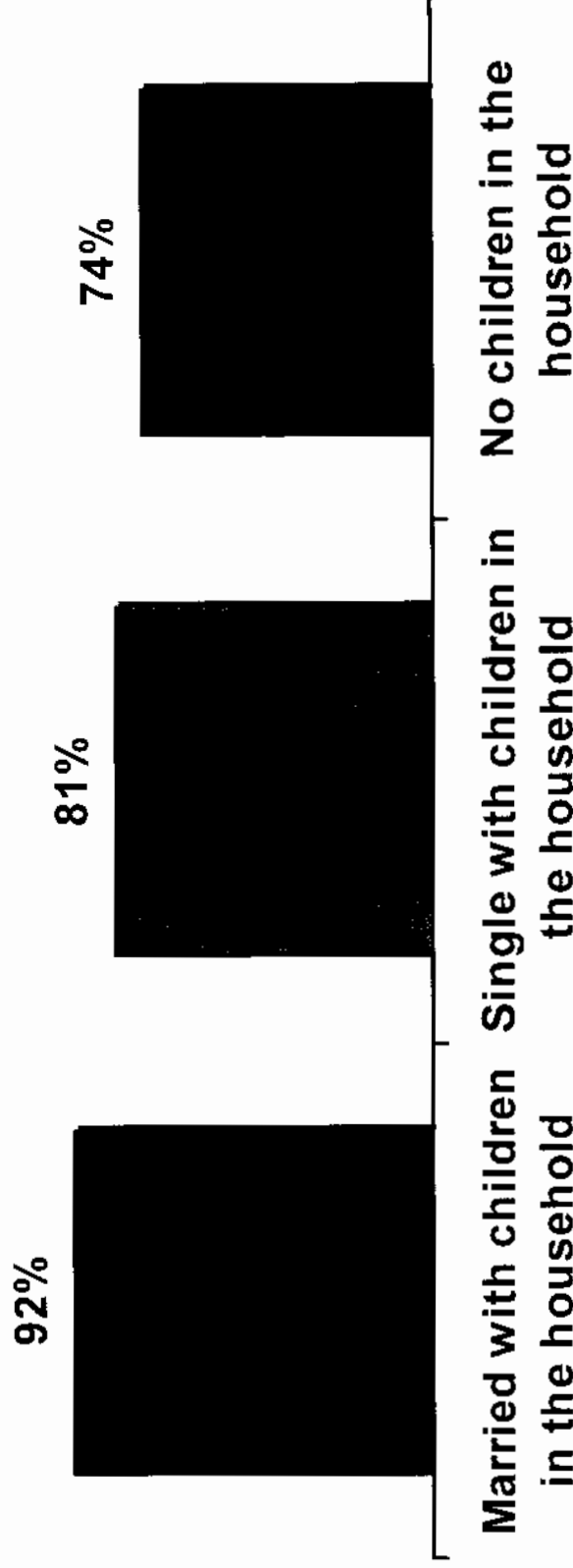
Source: 2007 Connected Tennessee Residential Technology Assessment



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Tennessee Residents Who Access the Internet from Home or Some Other Place

Percent of Tennessee residents who access the Internet from home or some other place:



Statewide Average: 75% of Tennessee residents access the Internet from home or someplace else.

Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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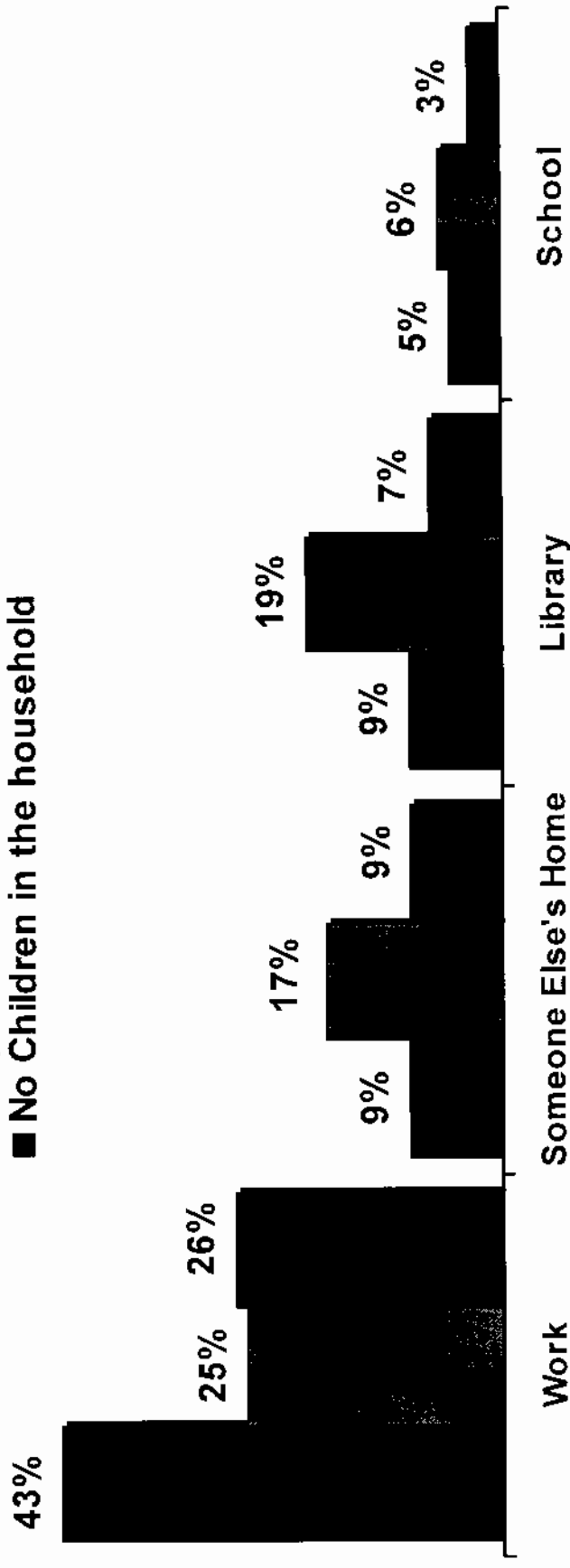
Source: 2007 Connected Tennessee Residential Technology Assessment



Most Popular Places For Tennessee Residents to Access the Internet

Percent of Tennessee residents who access the Internet someplace other than home:

- Married with Children in the household
- Single with Children in the household
- No Children in the household



Q. At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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Top Ten Internets Applications

Married with Children in the household 1. Sending e-mail 2. Using a search engine 3. Researching products 4. Purchasing products 5. Researching/booking travel 6. Sending or receiving photos 7. Searching for health or medical information 8. Reading news online 9. Online Banking 10. Searching for community event information	Single with Children in the household 1. Sending e-mail 2. Using a search engine 3. Researching products 4. Sending or receiving photos 5. Purchasing products 6. Searching for health or medical information 7. Reading news online 8. Research for schoolwork 9. Sending Instant Messages 10. Researching or booking travel	No Children in the household 1. Sending e-mail 2. Using a search engine 3. Researching products 4. Purchasing products 5. Searching for health or medical information 6. Reading news online 6. Researching/booking travel 7. Sending or receiving photos 9. Searching for community event information 10. Online Banking
--	--	--

Q: Which of the following activities do you conduct on the Internet?

(n = 7,167 TN residents with Internet service at home)

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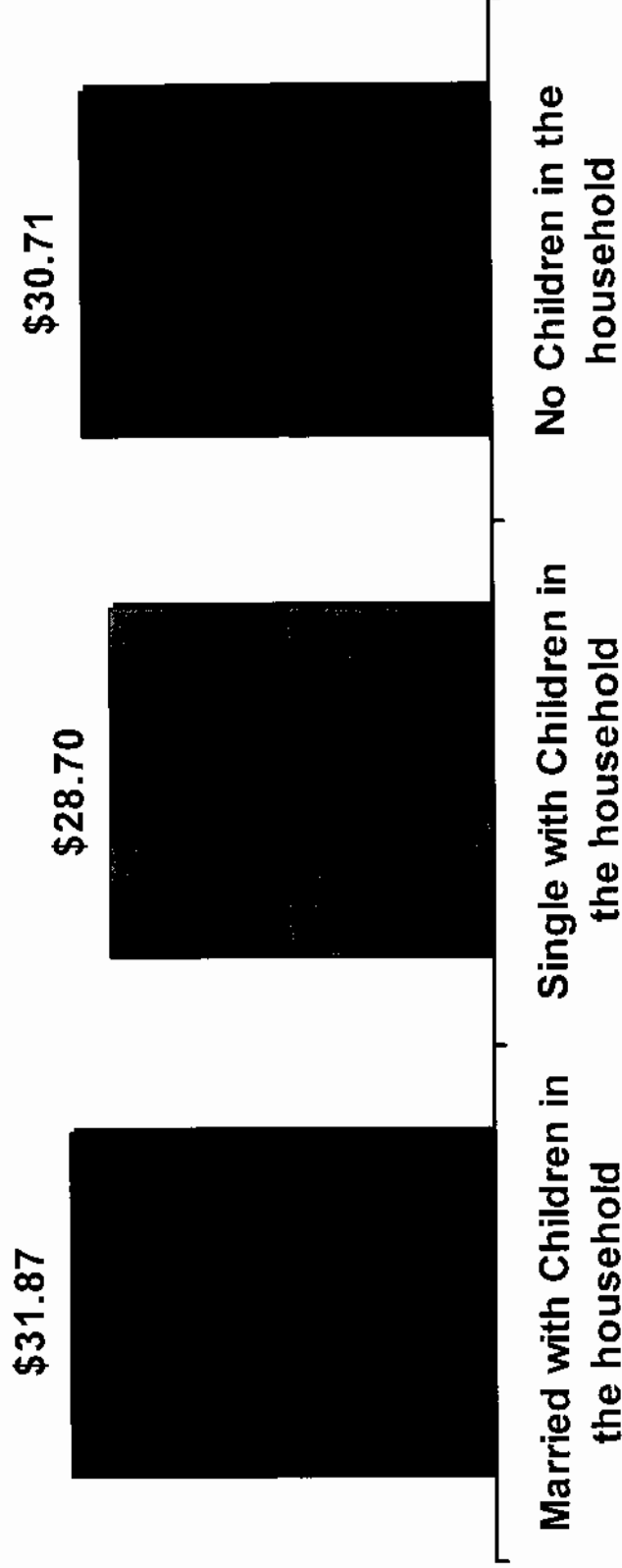
Source: 2007 Connected Tennessee Residential Technology Assessment



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How Much Tennessee Residents Pay for their Internet Service

Average monthly price Tennessee residents pay for home Internet service:



Statewide Average: Tennessee residents report paying an average of \$30.61 per month.

Q: What do you pay each month for your Internet service?

(n = 6,191 TN residents with Internet service at home)

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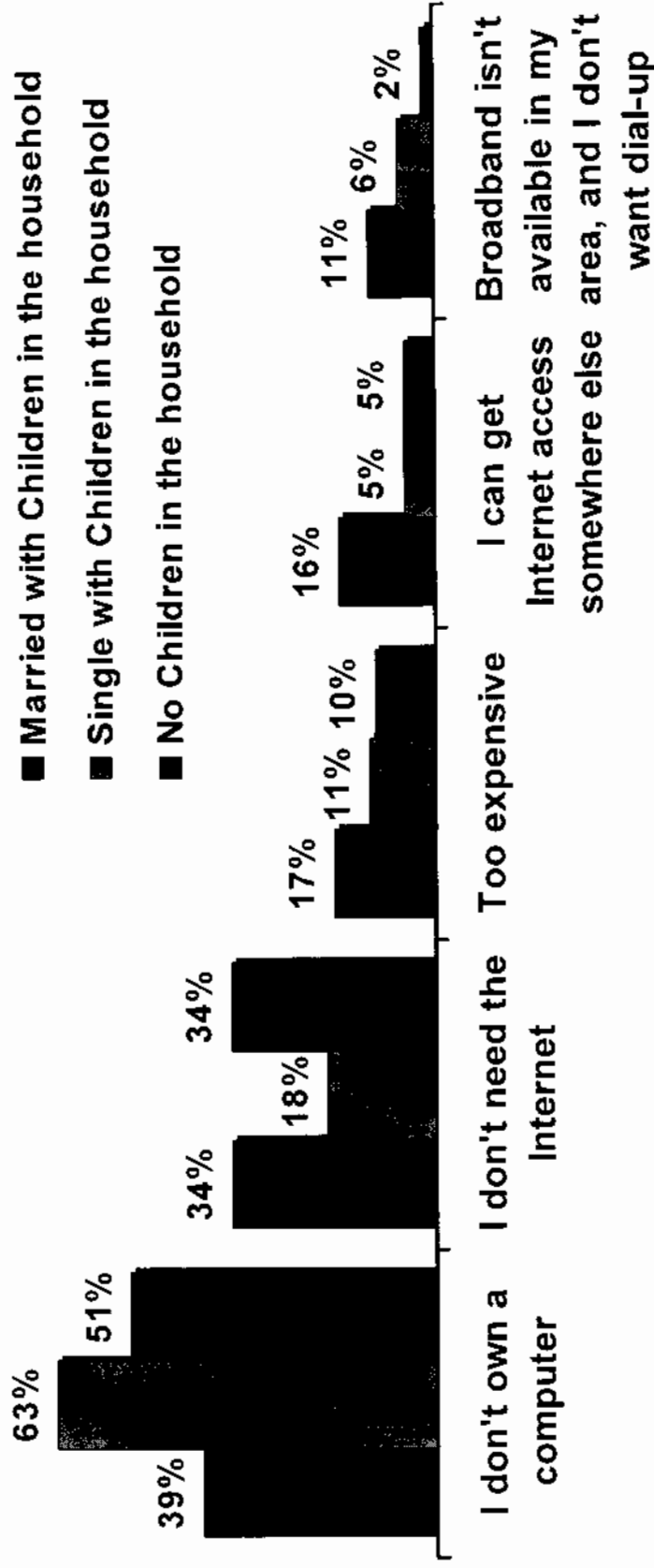
Source: 2007 Connected Tennessee Residential Technology Assessment



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THE TRAIL TO INNOVATION

Barriers to Internet Adoption

Percent of Tennessee residents who do not have an Internet connection at home for the following reasons:



Q: Why don't you subscribe to the Internet at home?
(n = 3,237 TN residents without Internet service at home)
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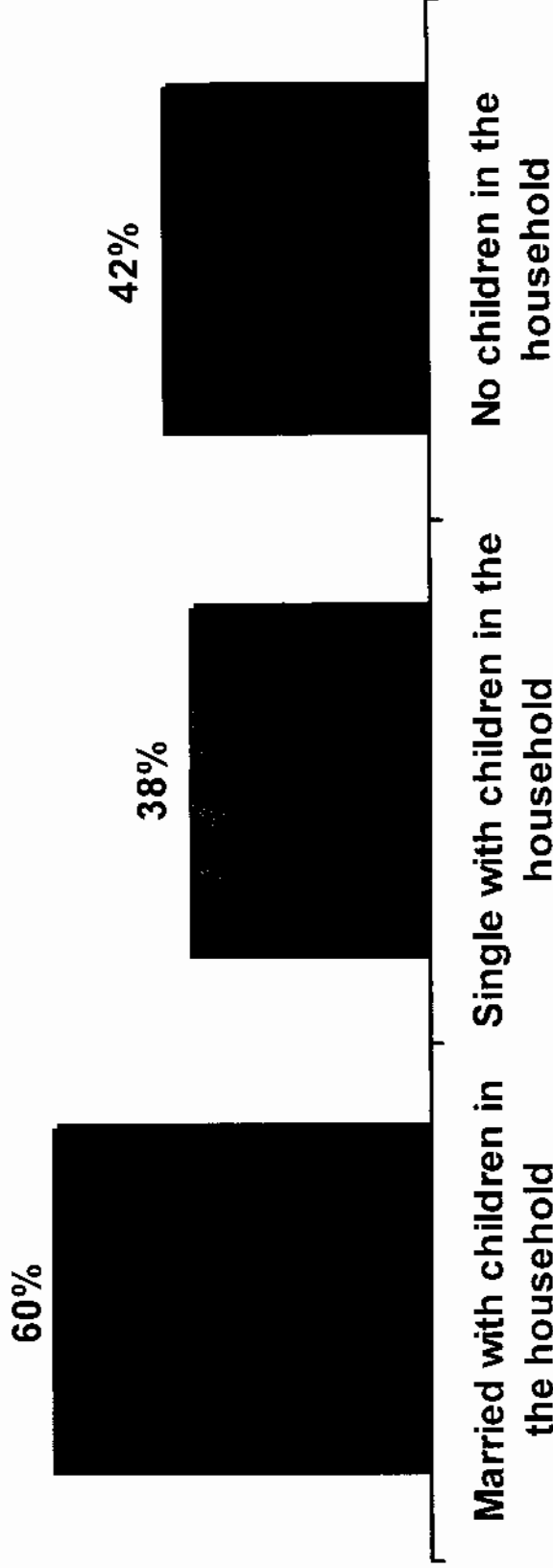
Source: 2007 Connected Tennessee Residential Technology Assessment
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Tennessee Residents That Have Broadband in their Household

Percent of Tennessee residents who have a broadband connection at home:



Statewide Average: 43% of all Tennessee residents have broadband access at home.

Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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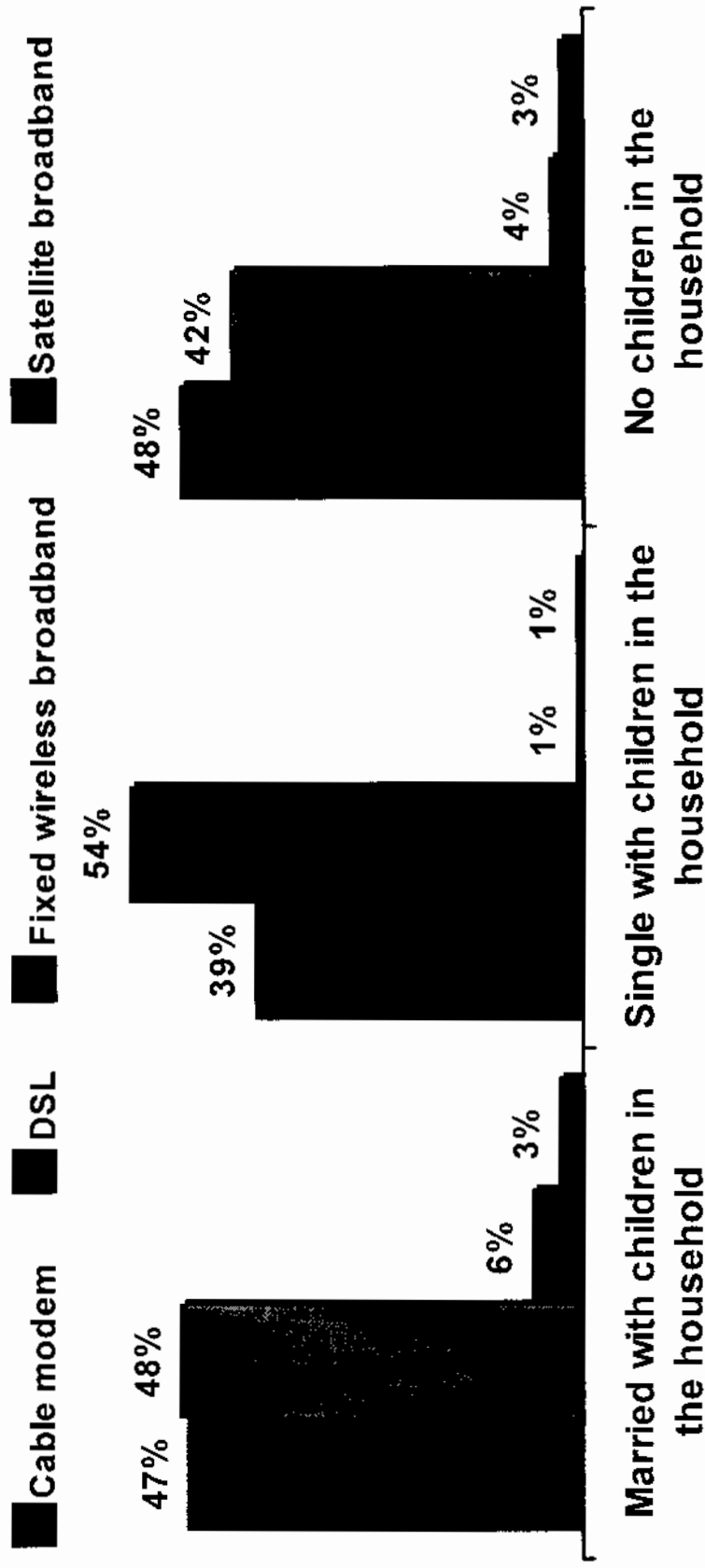
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Top Methods of Broadband Access

Percent of Tennessee residents with a broadband connection at home:



Q. Which of the following describes the broadband service you have at home?

(n = 4,035 TN residents with broadband service at home)

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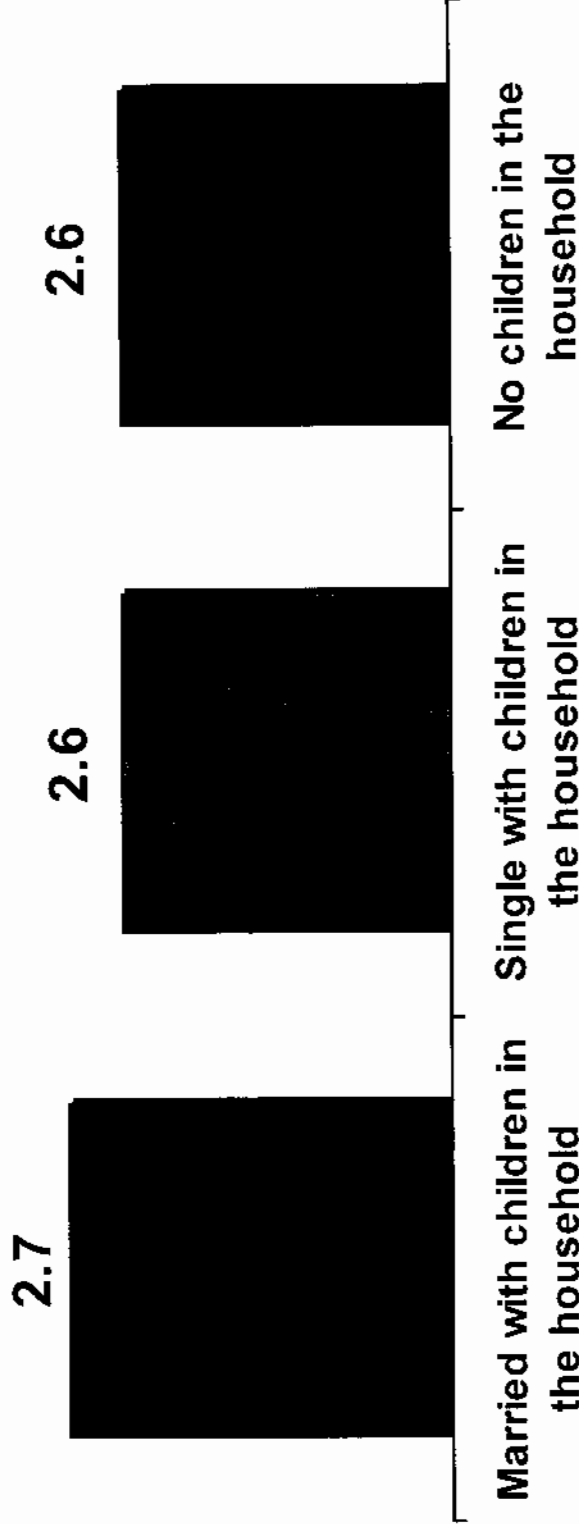
Source: 2007 Connected Tennessee Residential Technology Assessment



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How Long Tennessee Residents Have Had Broadband in their Household

Average number of years Tennessee residents have used broadband from home:



Statewide Average: Tennessee residents adopted broadband 2.6 years ago on average.

Q: When did you subscribe to broadband service?

(n = 4,053 TN residents with broadband service at home)

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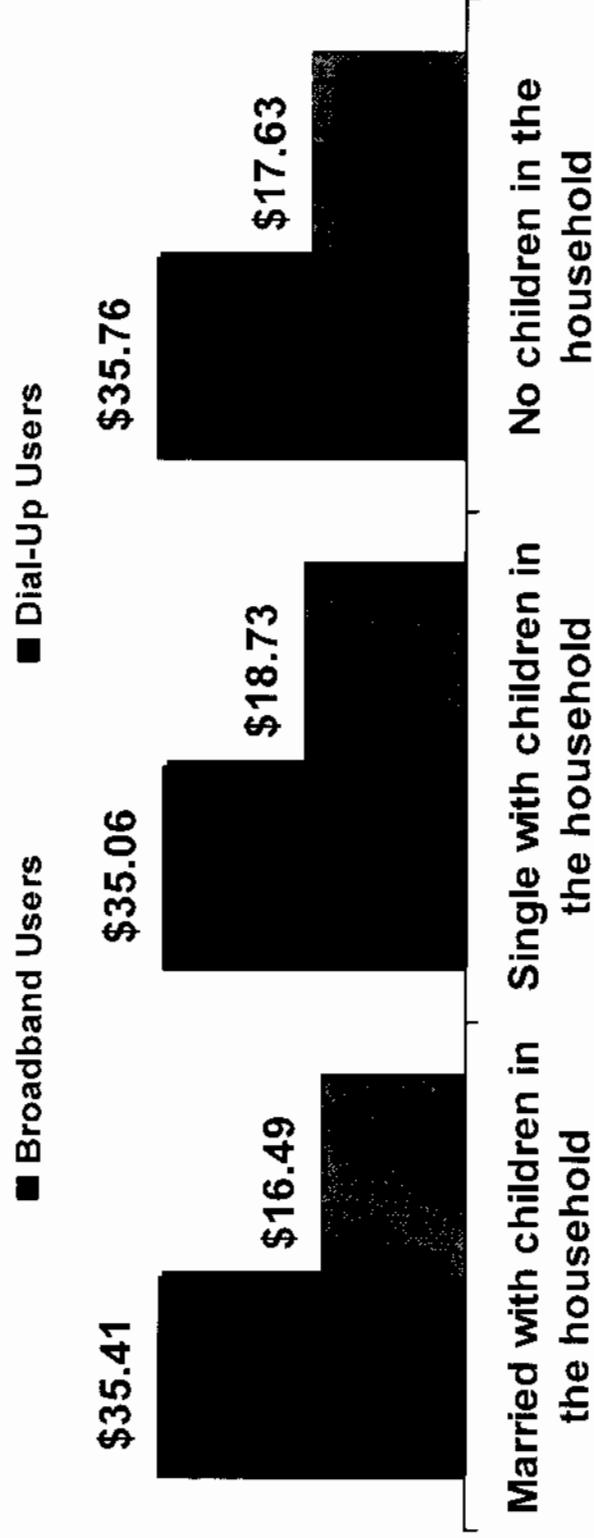
Source: 2007 Connected Tennessee Residential Technology Assessment



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How Much Tennessee Residents Pay for Internet

Average monthly cost that Tennessee residents pay for broadband and dial-up connections at home:



Statewide Average: Tennessee residents pay an average of \$36.65 per month for home broadband access and \$17.82 for dial-up.

Q: What do you pay each month for your Internet service?

(n = 4,053 TN residents with broadband service at home)

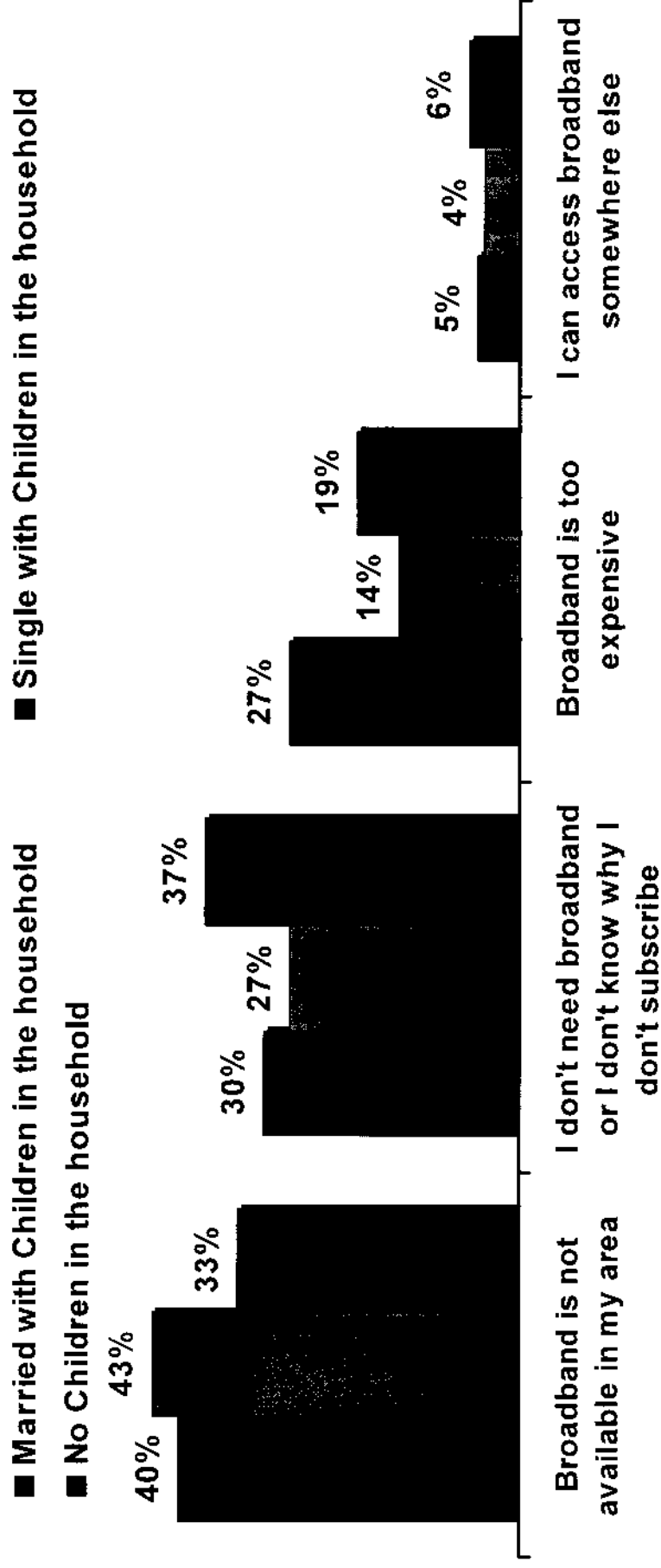
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Source: 2007 Connected Tennessee Residential Technology Assessment



Top Barriers to Broadband Adoption

Percent of Tennessee residents using dial-up service at home:



Q: Why don't you subscribe to broadband at home?
(n = 1,787 TN residents with dial-up service at home)
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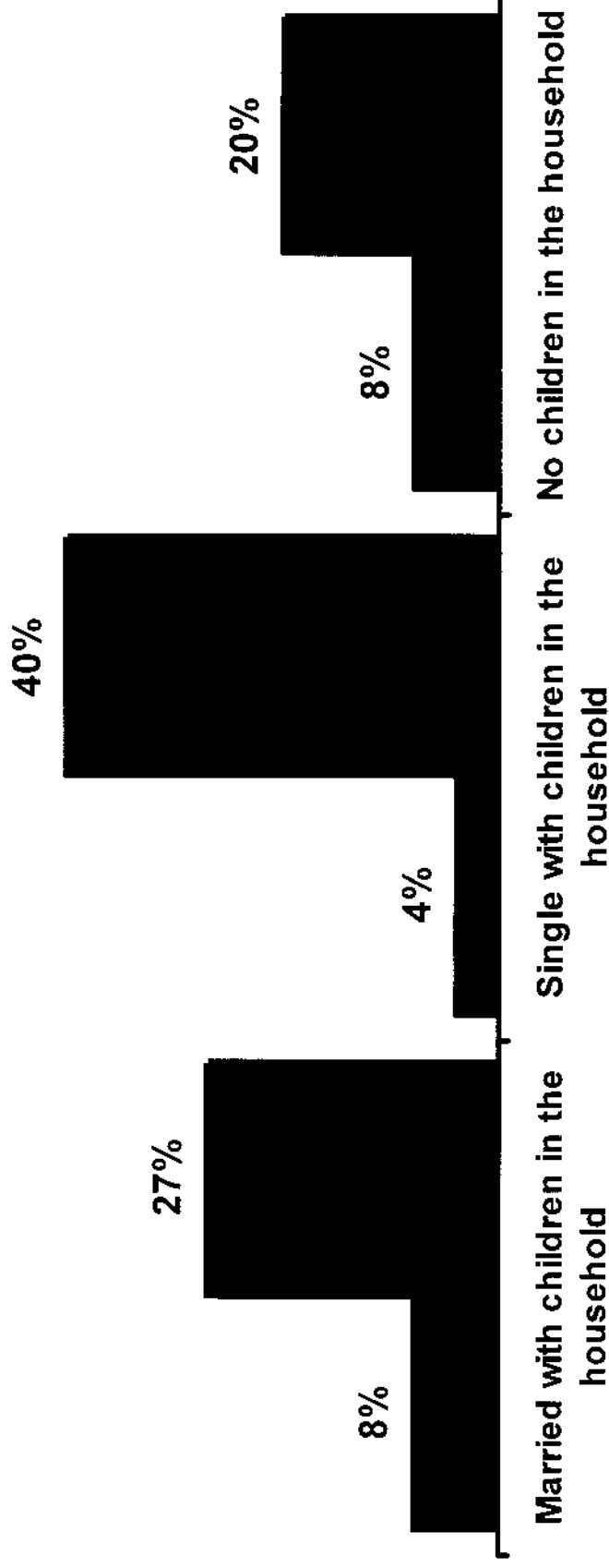
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Tennessee Residents and Telework

Percent of Tennessee residents employed full or part time who:

■ Regularly telework now

■ Would telework if allowed



Q: Do you regularly work from home through a broadband connection, commonly known as teleworking?

(n = 5,487 TN residents employed full or part time)

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Source: 2007 Connected Tennessee Residential Technology Assessment

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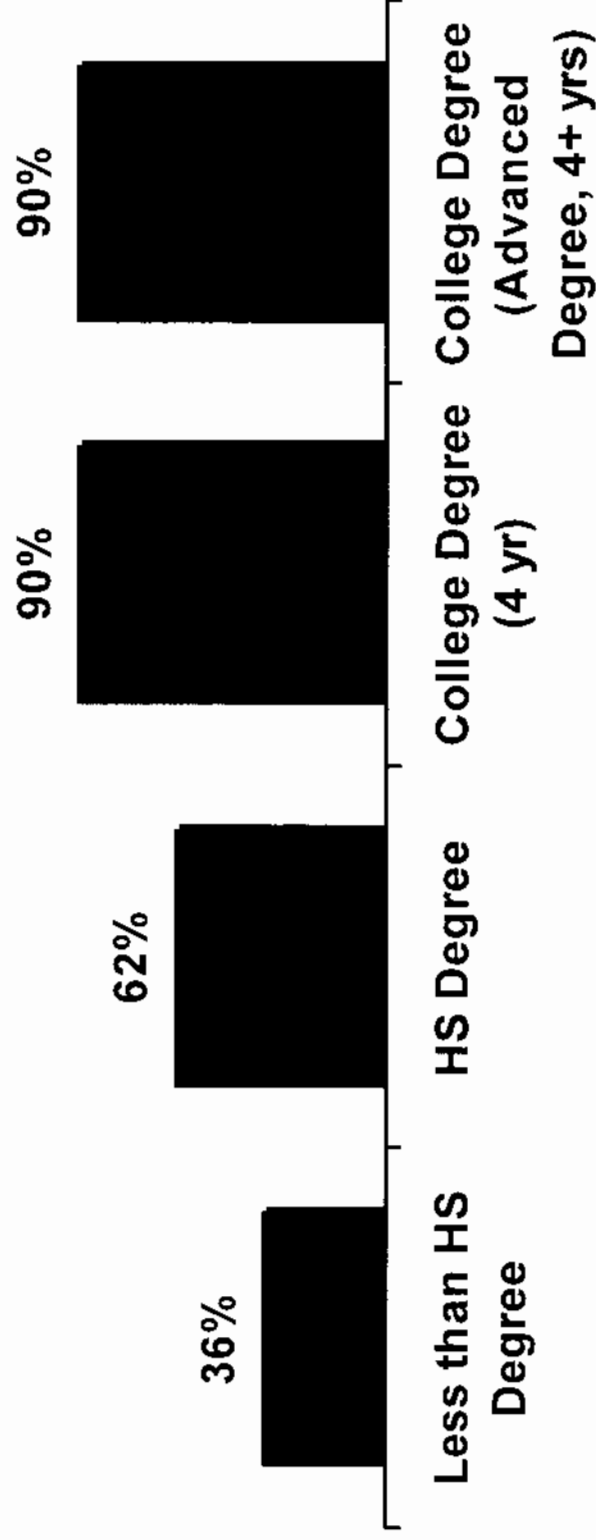
Residential Technology Assessment by Educational Attainment



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Tennessee Residents with a Computer at Home

Percent of Tennessee residents who have a computer at home:



Statewide Average: 71% of Tennessee residents report having a personal computer at home.

Q: Does your household have a computer?

(n = 9,513 TN residents)

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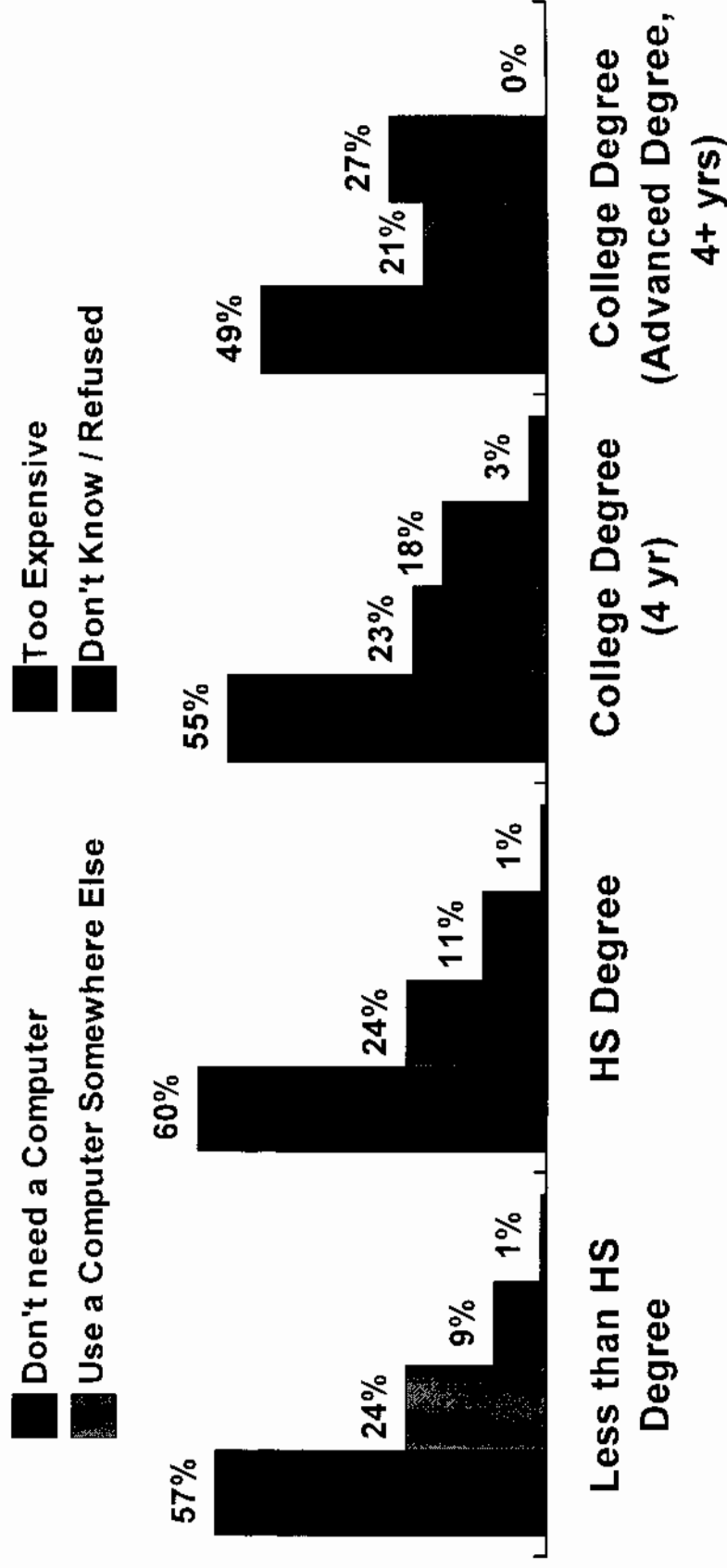
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Barriers to Computer Ownership

Top responses given when asked why Tennessee residents do not own a computer:



Q: Why don't you have a computer at home?

(n = 2,735 TN residents with no computer in their household)

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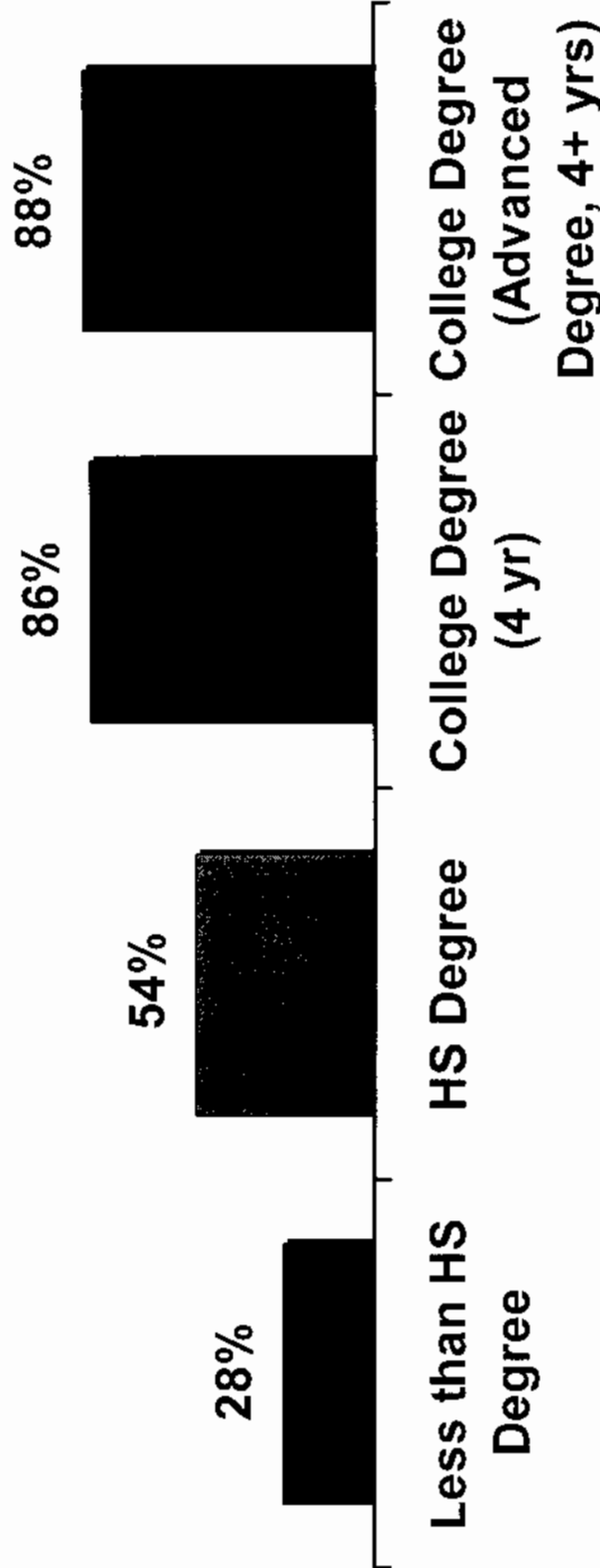
Source: 2007 Connected Tennessee Residential Technology Assessment



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THE TRAIL TO INNOVATION

Tennessee Residents with an Internet Connection at Home

Percent of Tennessee residents who have an Internet connection at home:



Statewide Average: 65% of Tennessee residents report having an Internet connection at home.

Q: Do you have an Internet connection at home?

(n = 9,513 TN residents)

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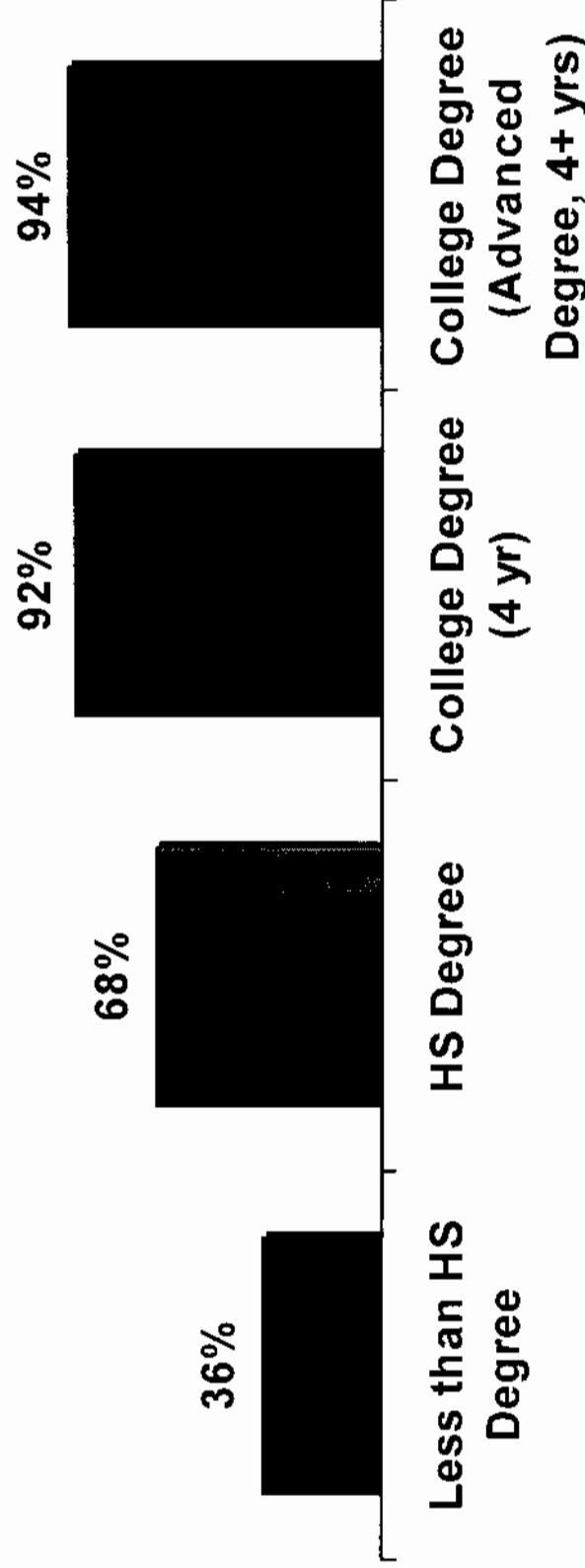
Source: 2007 Connected Tennessee Residential Technology Assessment



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THE TRAIL TO INNOVATION

Tennessee Residents Who Access the Internet from Home or Some Other Place

Percent of Tennessee residents who access the Internet from home or some other place:



Statewide Average: 75% of Tennessee residents report accessing Internet from home or someplace else.

Q. At what locations do you have access to the Internet?

(n = 9,513 TN residents)

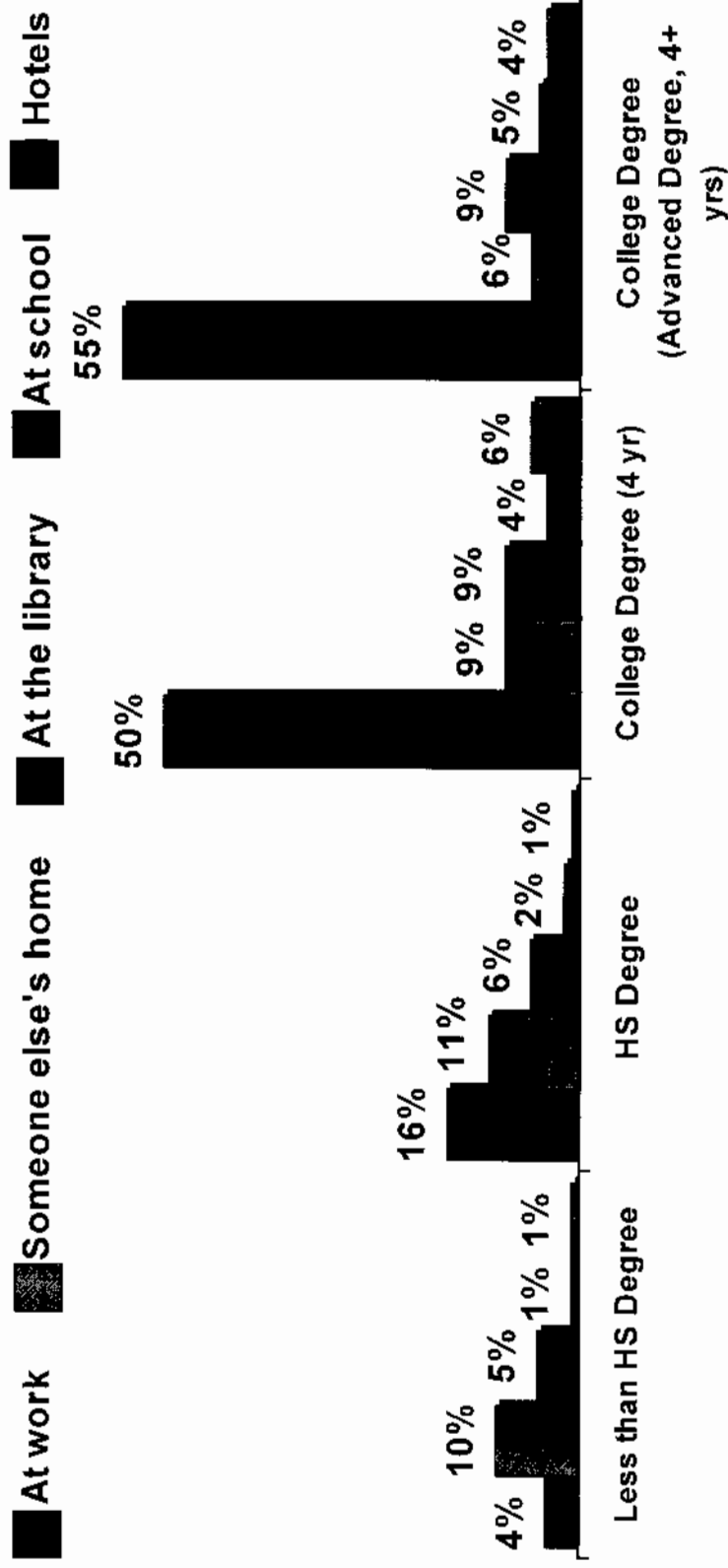
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Most Popular Places For Tennessee Residents to Access the Internet

Percent of Tennessee residents who access the Internet someplace other than home:



Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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Top Ten Internet Applications

No H.S. Diploma

1. Sending e-mail
2. Purchasing a product online
3. Using a search engine
4. Researching a product online
5. Sending or receiving photos
6. Playing games online
7. Sending instant messages
8. Downloading music
9. Reading online newspapers or other news sources
10. Research for schoolwork

Q: Which of the following activities do you conduct on the Internet?

(n = 7,167 TN residents with Internet service at home)

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H.S. Diploma

1. Sending e-mail
2. Researching a product online
3. Purchasing a product online
4. Using a search engine
5. Sending or receiving photos
6. Searching for health or medical information
7. Reading news online
8. Playing games online
9. Researching or booking travel
10. Searching for community event information

Source: 2007 Connected Tennessee Residential Technology Assessment

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Top Ten Internet Applications (continued)

College (4 Yrs)

1. Sending e-mail
2. Using a search engine
3. Researching a product online
4. Researching or booking travel
5. Purchasing a product online
6. Reading news online
7. Sending or receiving photos
8. Searching for health or medical information
9. Online Banking
10. Searching for community event information

Q: Which of the following activities do you conduct on the Internet?

(n = 7,167 TN residents with Internet service at home)

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College (Advanced Deg.)

1. Sending e-mail
2. Using a search engine
3. Researching a product online
4. Researching or booking travel
5. Purchasing a product online
6. Sending or receiving photos
7. Reading news online
8. Searching for health or medical information
9. Searching for community event info
10. Online Banking

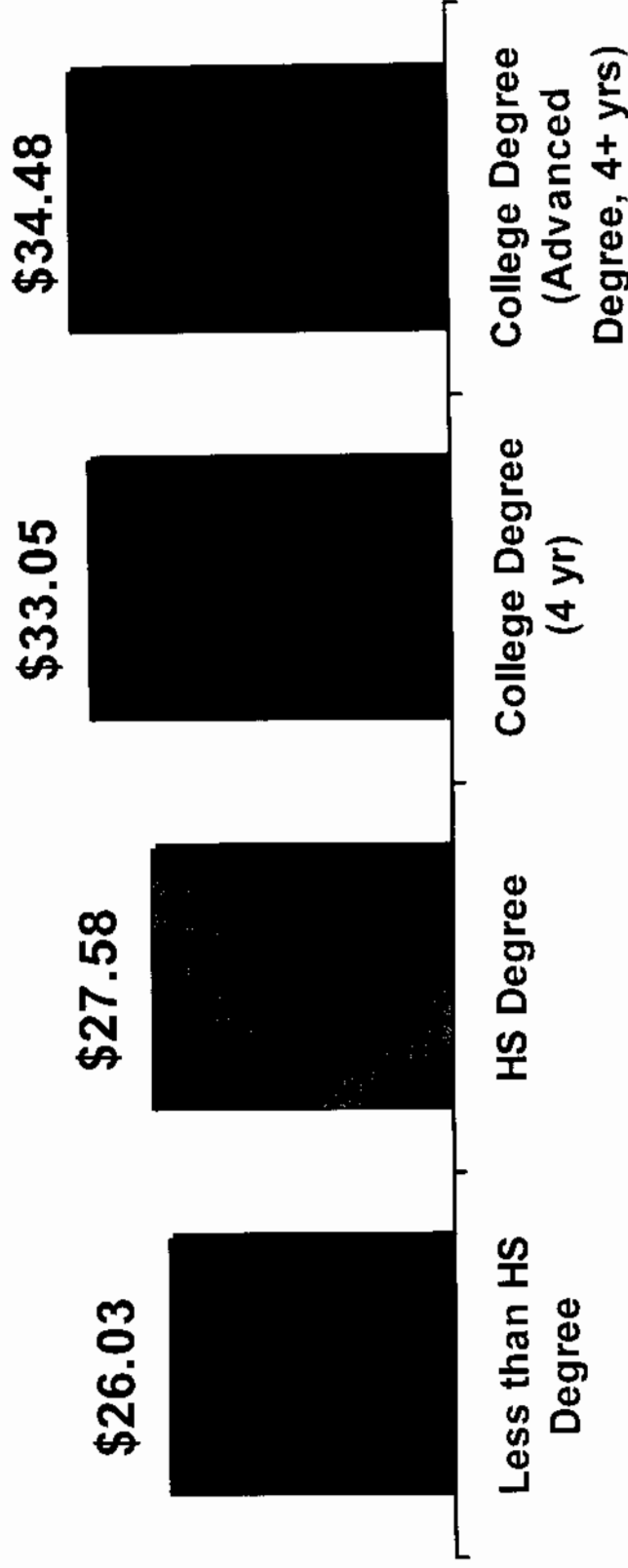
Source: 2007 Connected Tennessee Residential Technology Assessment



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THE TRAIL TO INNOVATION

How Much Tennessee Residents Pay for their Internet Service

Average monthly price Tennessee residents pay for home Internet service:



Statewide Average: Tennessee residents report paying an average of \$30.61 per month.

Q: What do you pay each month for your Internet service?

(n = 6,191 TN residents with Internet service at home)

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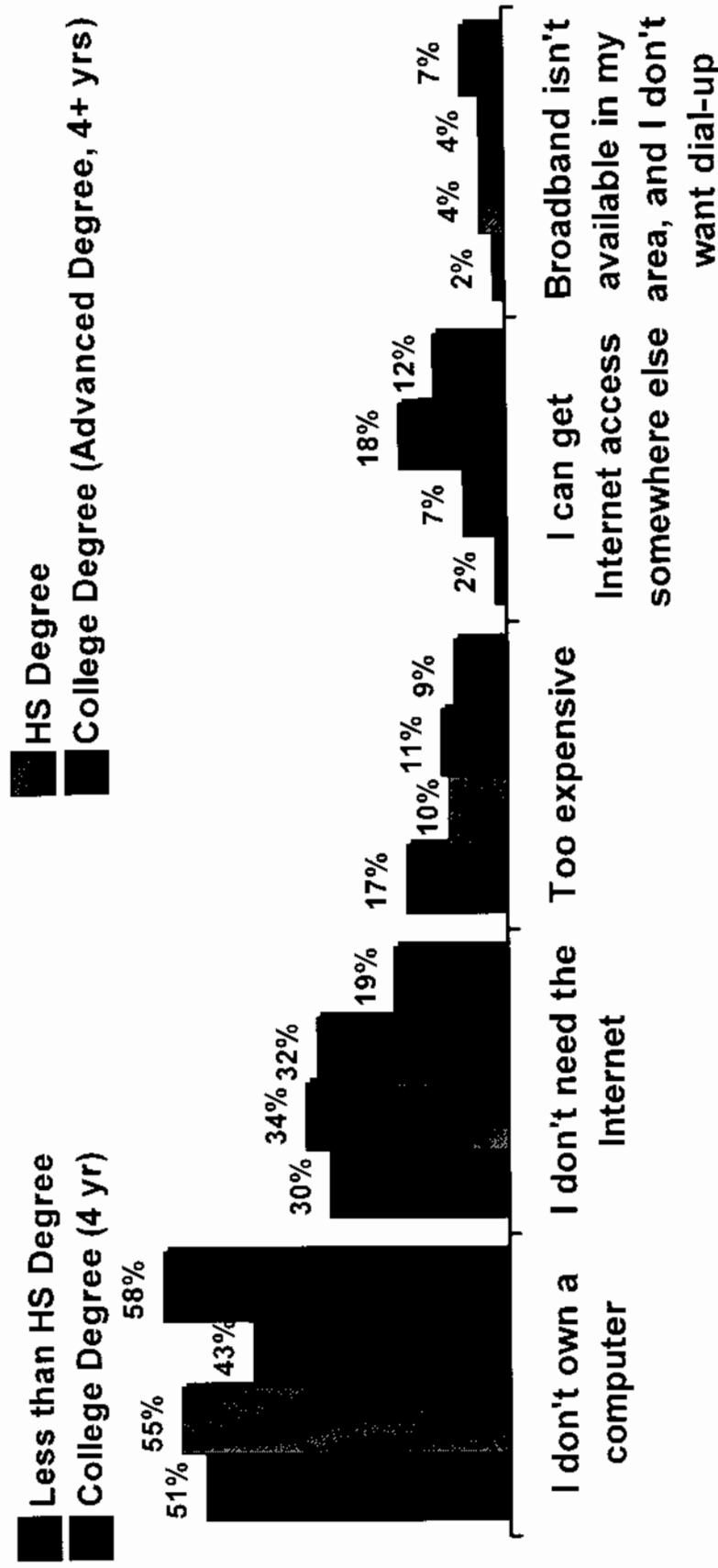


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THE TRAIL TO INNOVATION

Barriers to Internet Adoption

Percent of Tennessee residents who do not have an Internet connection at home for the following reasons:



Q: Why don't you subscribe to the Internet at home?

(n = 3,237 TN residents without Internet service at home)

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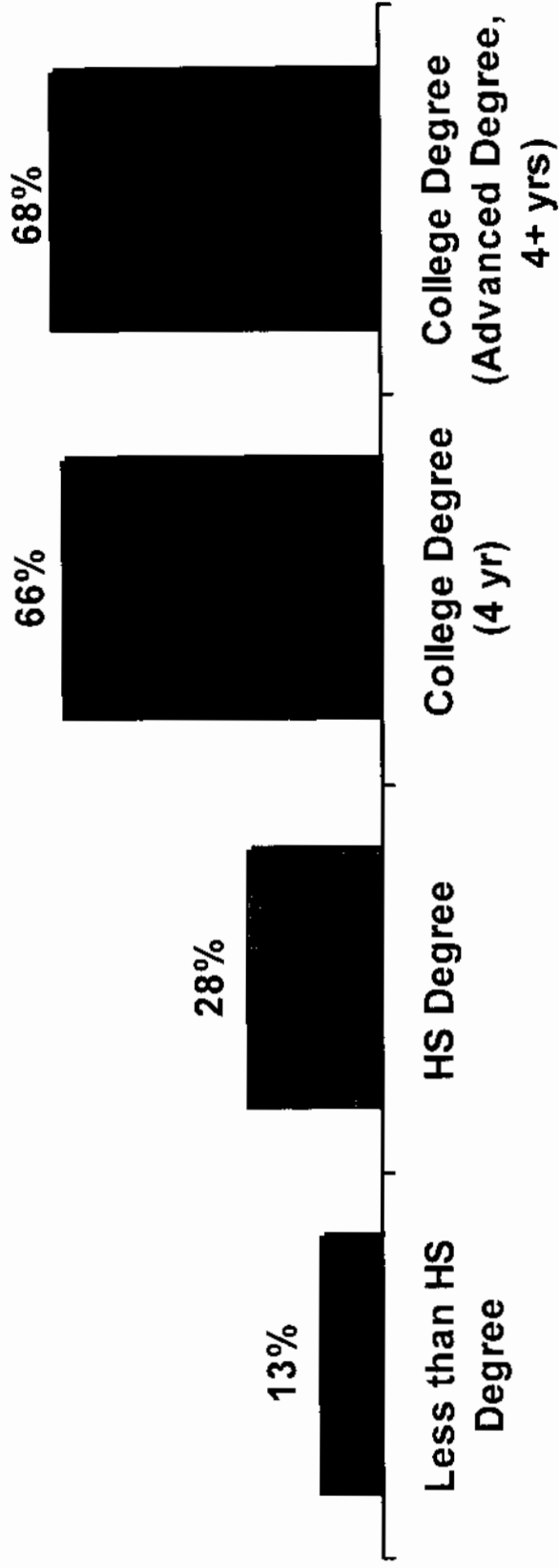
Source: 2007 Connected Tennessee Residential Technology Assessment



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Tennessee Residents That Have Broadband in their Household

Percent of Tennessee residents who have a broadband connection at home:



Statewide Average: 43% of all Tennessee residents have a broadband connection at home.

Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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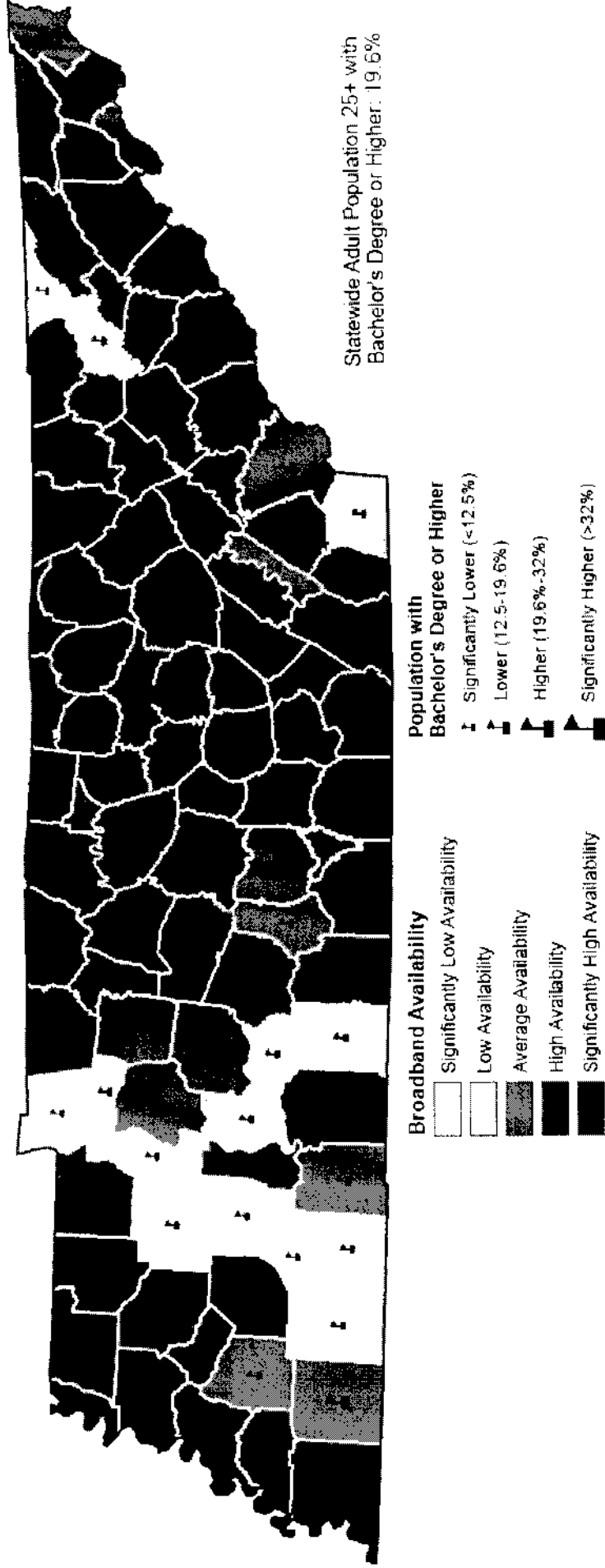
Source: 2007 Connected Tennessee Residential Technology Assessment



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Broadband Availability vs. Educational Attainment by County

BROADBAND AVAILABILITY VS. EDUCATIONAL ATTAINMENT



Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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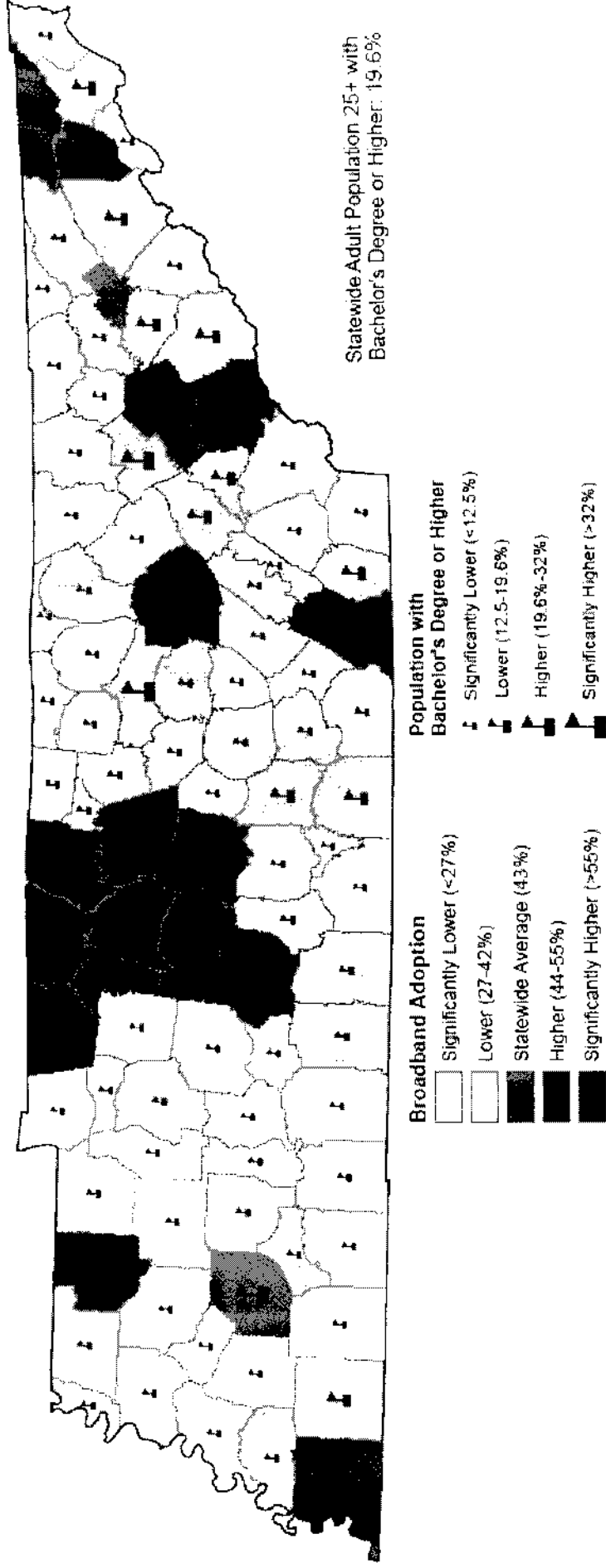
Source: 2007 Connected Tennessee Residential Technology Assessment



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Broadband Adoption vs. Educational Attainment by County

BROADBAND ADOPTION VS. EDUCATIONAL ATTAINMENT



Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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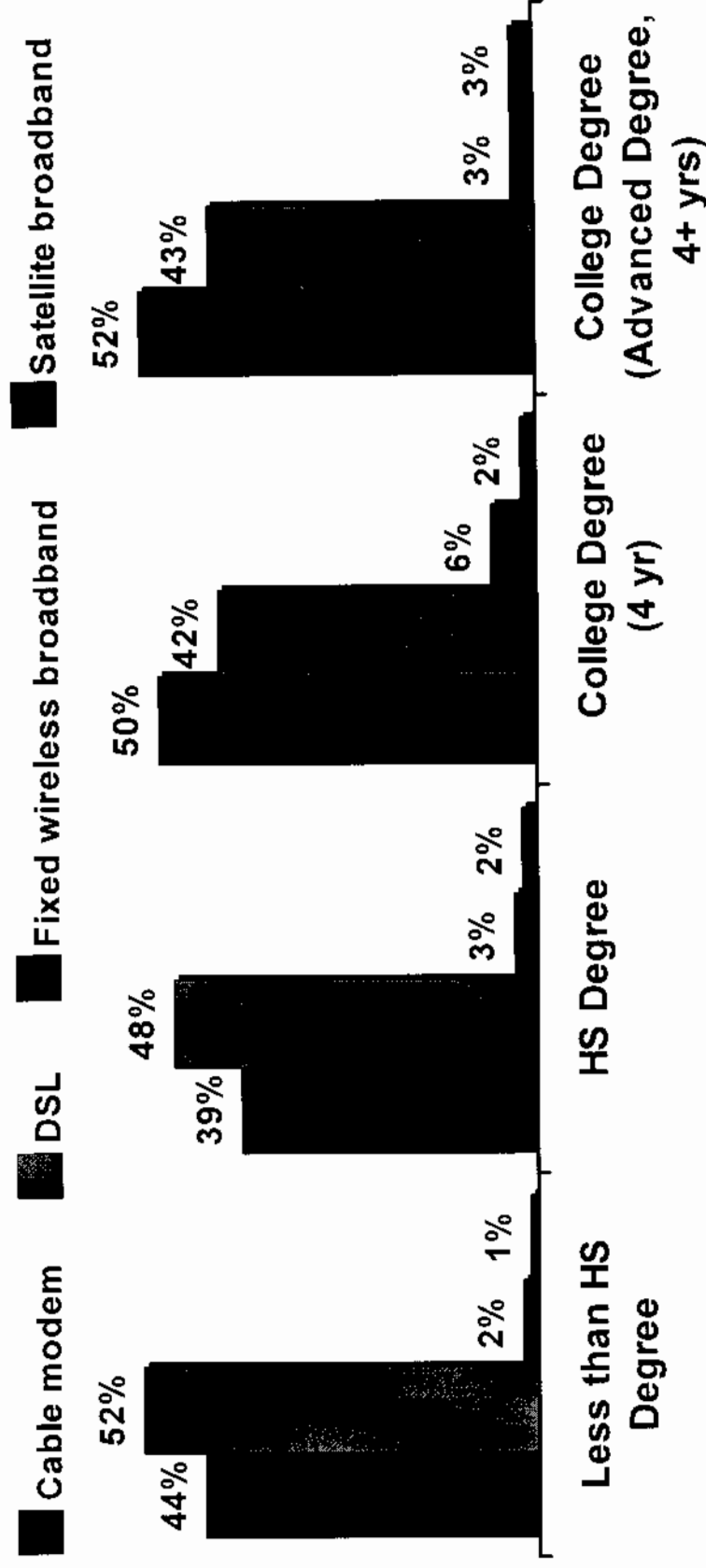
Source: 2007 Connected Tennessee Residential Technology Assessment



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Top Methods of Broadband Access

Percent of Tennessee residents with a broadband connection at home:



Q: Which of the following describes the broadband service you have at home?

(n = 4,035 TN residents with broadband service at home)

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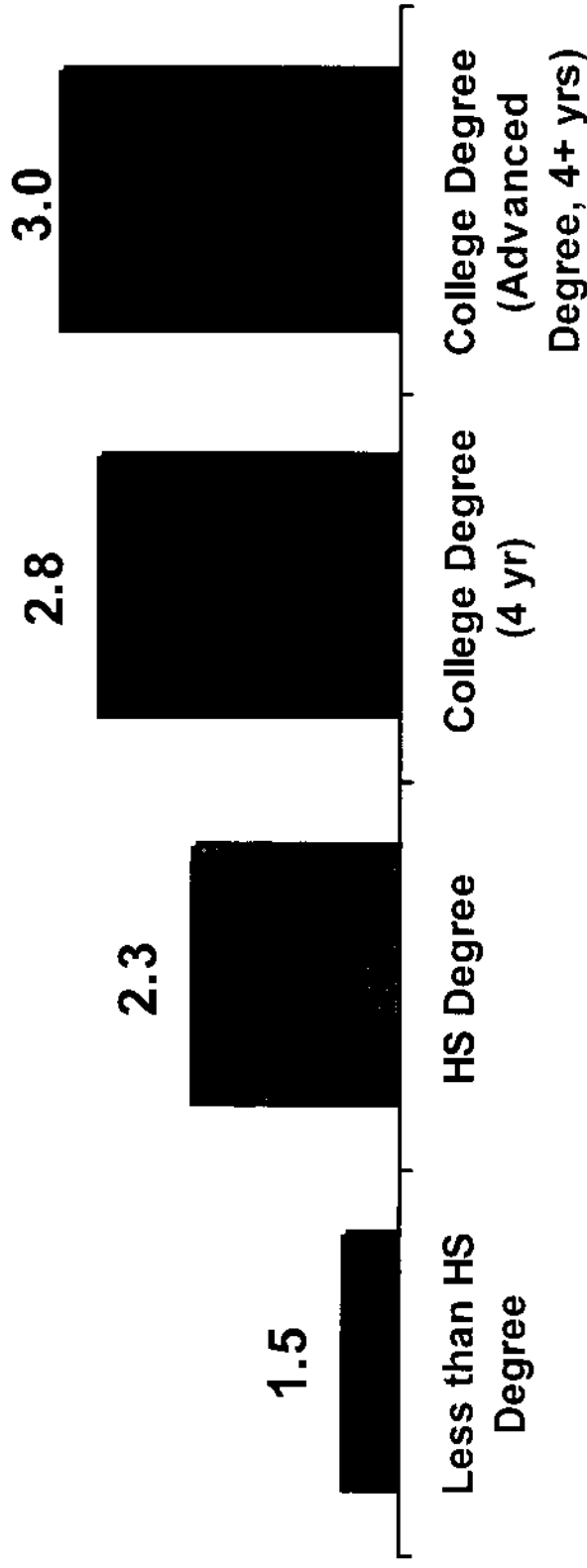
98

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How Long Tennessee Residents Have Had Broadband in their Household

**Average number of years Tennessee residents have accessed broadband
from home:**



**Statewide Average: Tennessee residents adopted broadband 2.6
years ago on average.**

Q: When did you subscribe to broadband service?

(n = 4,053 TN residents with broadband service at home)

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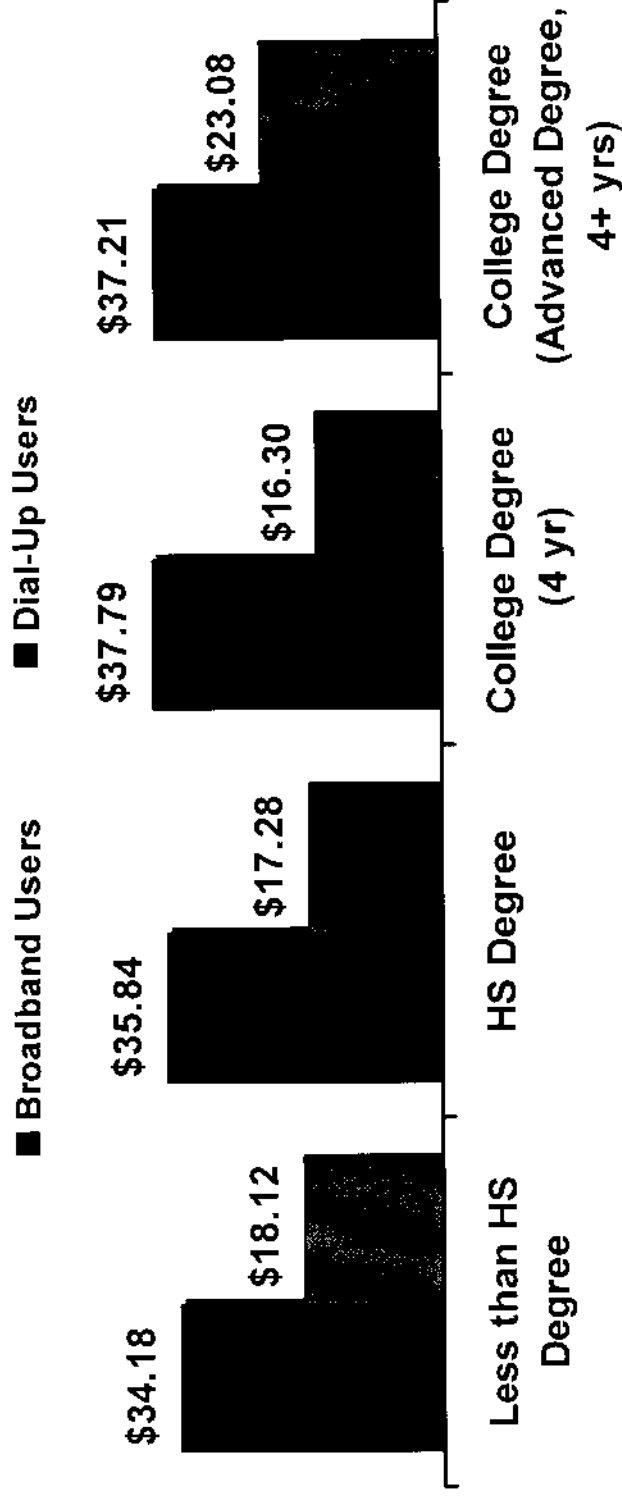


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How Much Tennessee Residents Pay for Internet

Average monthly cost that Tennessee residents pay for broadband and dial-up connections from home:



Statewide Average: Tennessee residents pay an average of \$36.65 per month for home broadband access and \$17.82 for dial-up.

Q: What do you pay each month for your Internet service?

(n = 4,053 TN residents with broadband service at home)

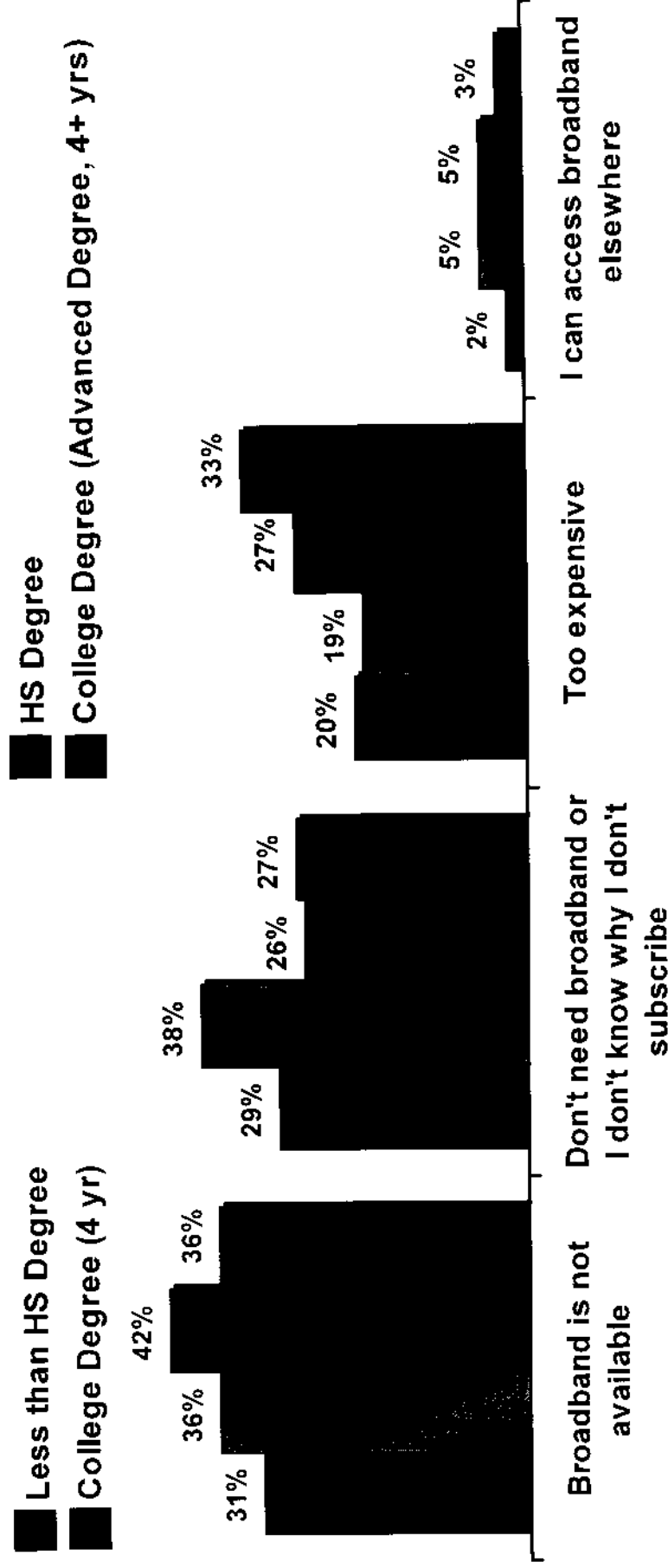
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Source: 2007 Connected Tennessee Residential Technology Assessment



Top Barriers to Broadband Adoption

Percent of Tennessee residents with dial-up service at home:



Q: Why don't you subscribe to broadband at home?

(n = 1,787 TN residents who rely on dial-up for Internet service at home)

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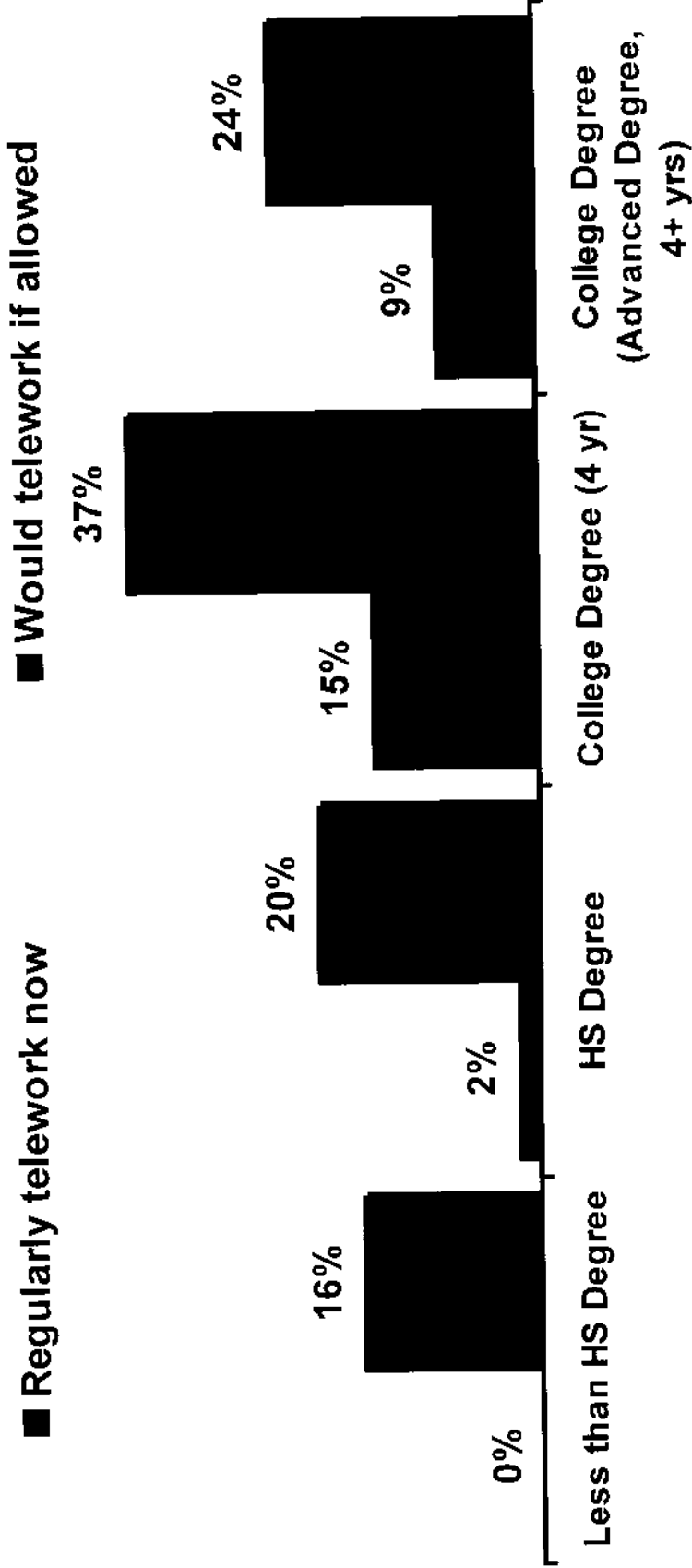
Source: 2007 Connected Tennessee Residential Technology Assessment

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Tennessee Residents and Telework

Percent of Tennessee residents employed full or part time who:



Q: Do you regularly work from home through a broadband connection, commonly known as teleworking?

(n = 5,487 TN residents employed full or part time)

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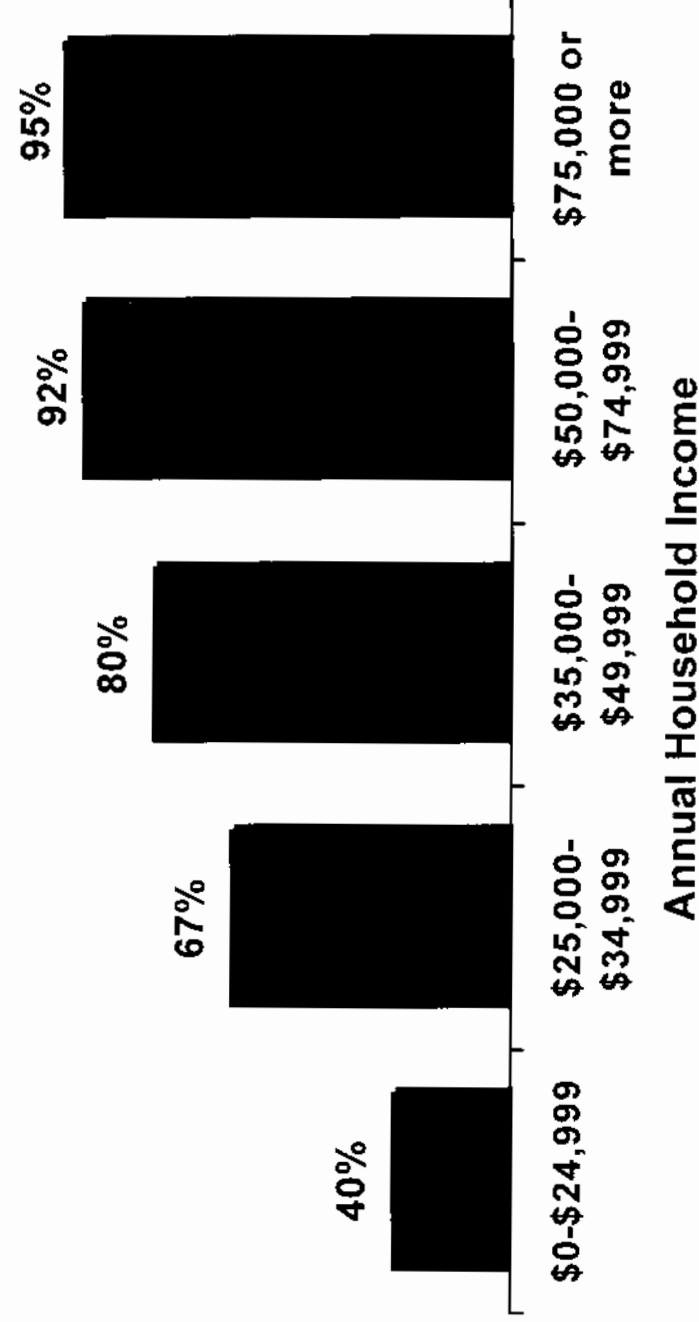
Residential Technology Assessment by Income



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Tennessee Residents with a Computer at Home

Percent of Tennessee residents who have a computer at home:



Statewide Average: 71% of Tennessee residents report having a personal computer at home.

Q: Does your household have a computer?

(n = 9,513 TN residents)

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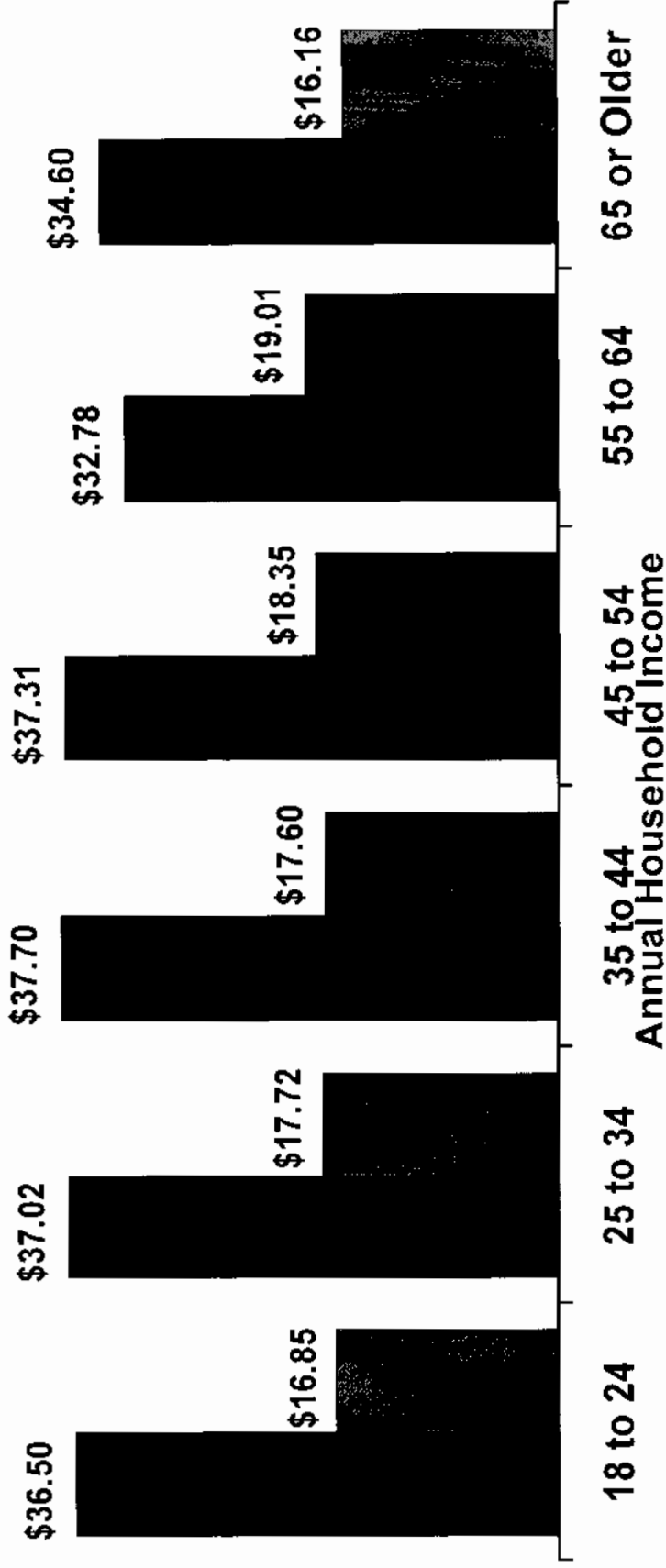


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THE PATH TO INNOVATION

Barriers to Computer Ownership

Top responses given when asked why Tennessee residents do not own a computer:

■ Broadband Users ■ Dial-Up Users



Q: Why don't you have a computer at home?

(n = 2,735 TN residents with no computer in their household)

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Barriers to Computer Ownership

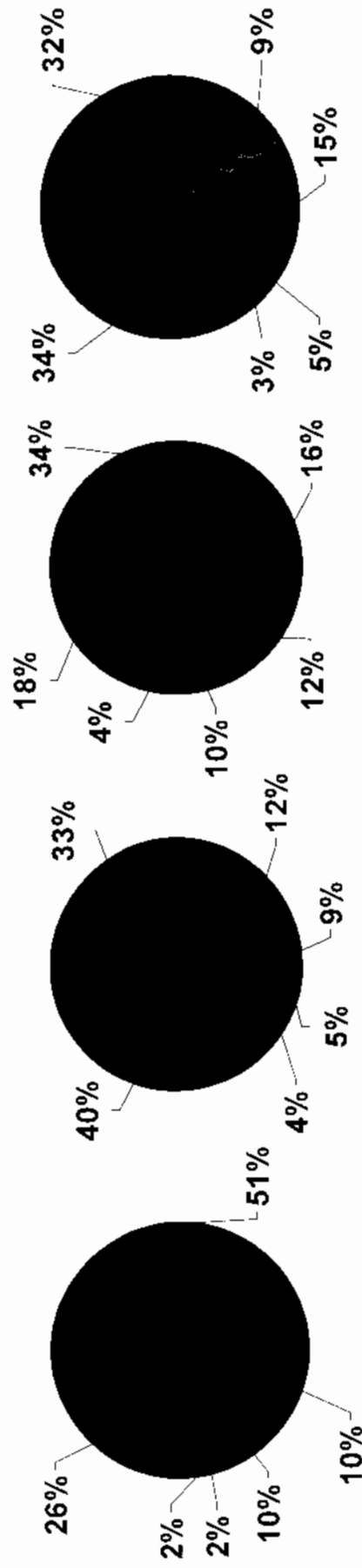
Income distribution of the top barriers to computer ownership:

Computers are too expensive:

I do not need a computer:

I use a computer somewhere else:

Something other:



Less than \$25,000 \$25,000-\$34,999 \$35,000-\$49,999 \$50,000-\$74,999 \$75,000 or more Income not specified

Q: Why don't you have a computer at home?

(n = 2,735 TN residents with no computer in their household)

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Source: 2007 Connected Tennessee Residential Technology Assessment

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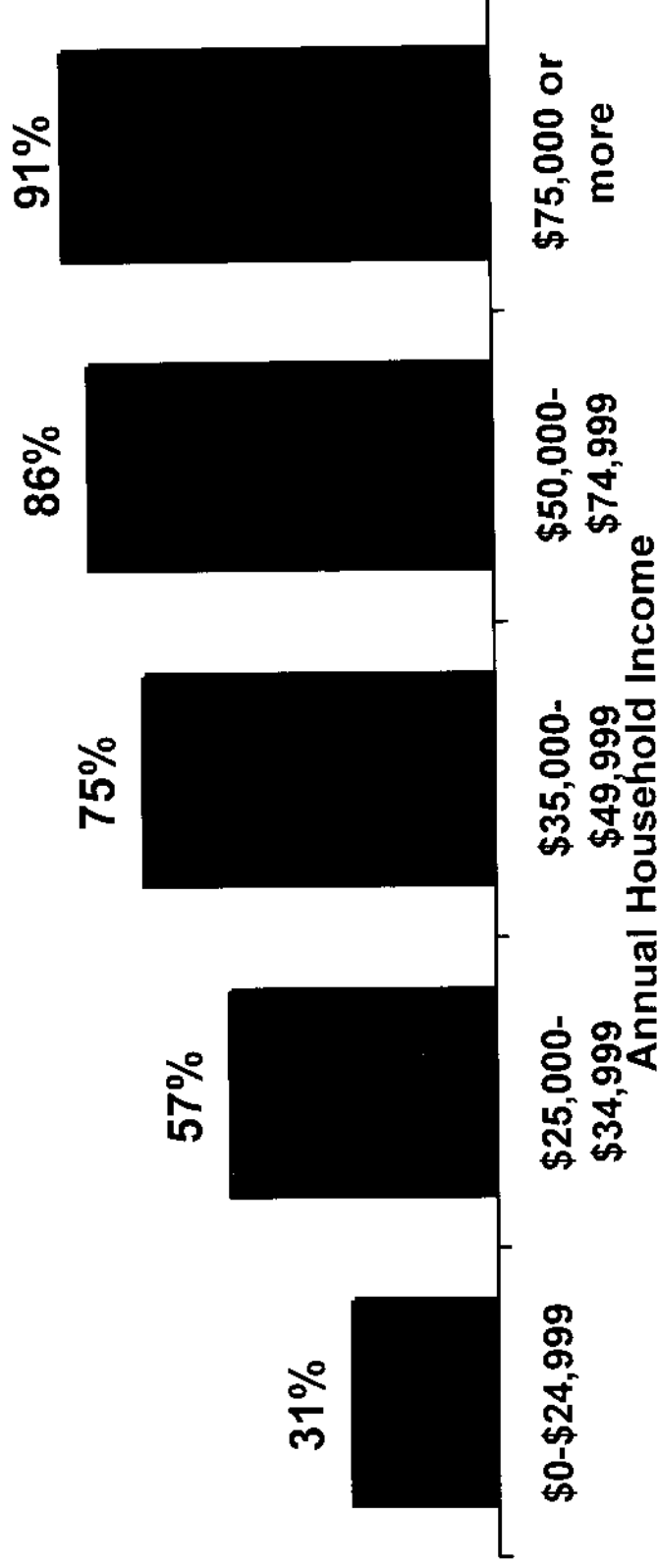
www.connectedtennessee.org



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Tennessee Residents with an Internet Connection at Home

Percent of Tennessee residents who access the Internet at home:



Statewide Average: 65% of Tennessee residents report having an Internet connection at home.

Q. Do you have an Internet connection at home?

(n = 9,513 TN residents)

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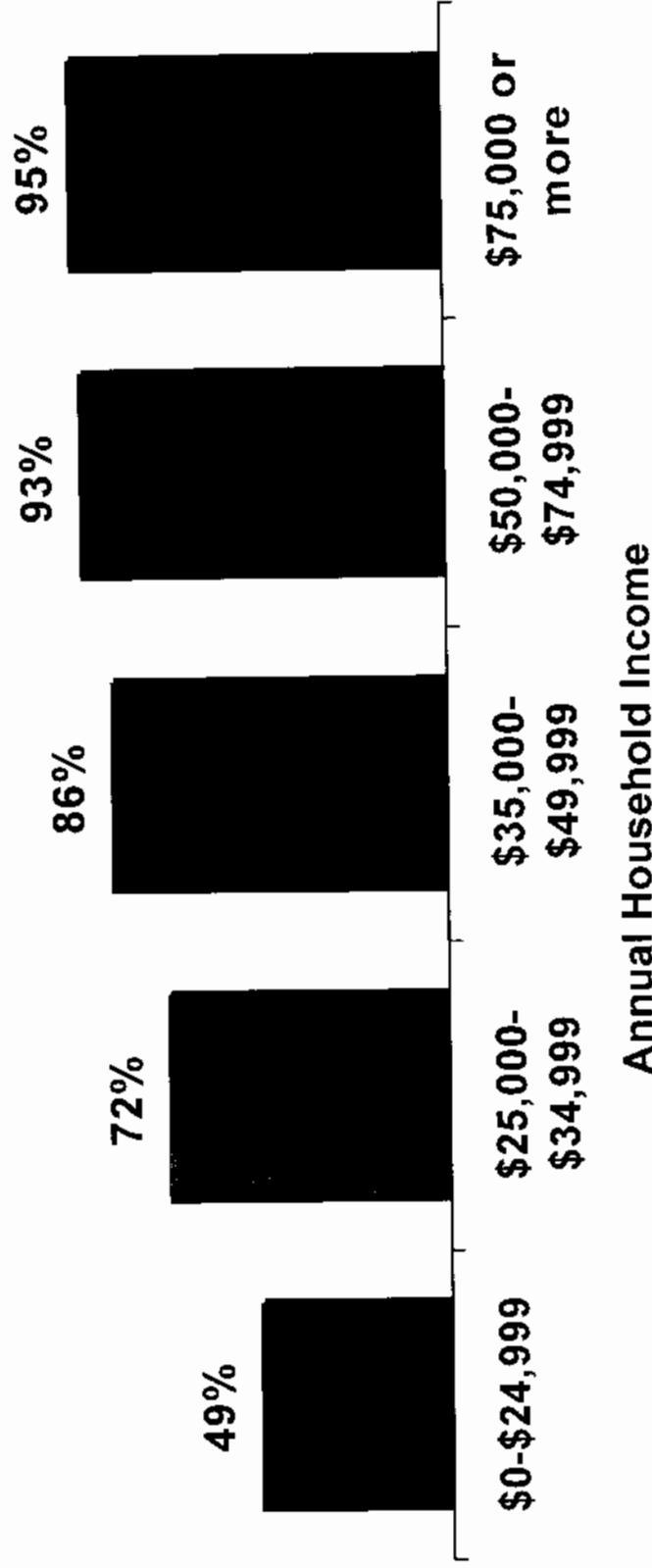
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Tennessee Residents Who Access the Internet from Home or Some Other Place

Percent of Tennessee residents who access the Internet from home or some other place:



Statewide Average: 75% of Tennessee residents report using the Internet at home or someplace else.

Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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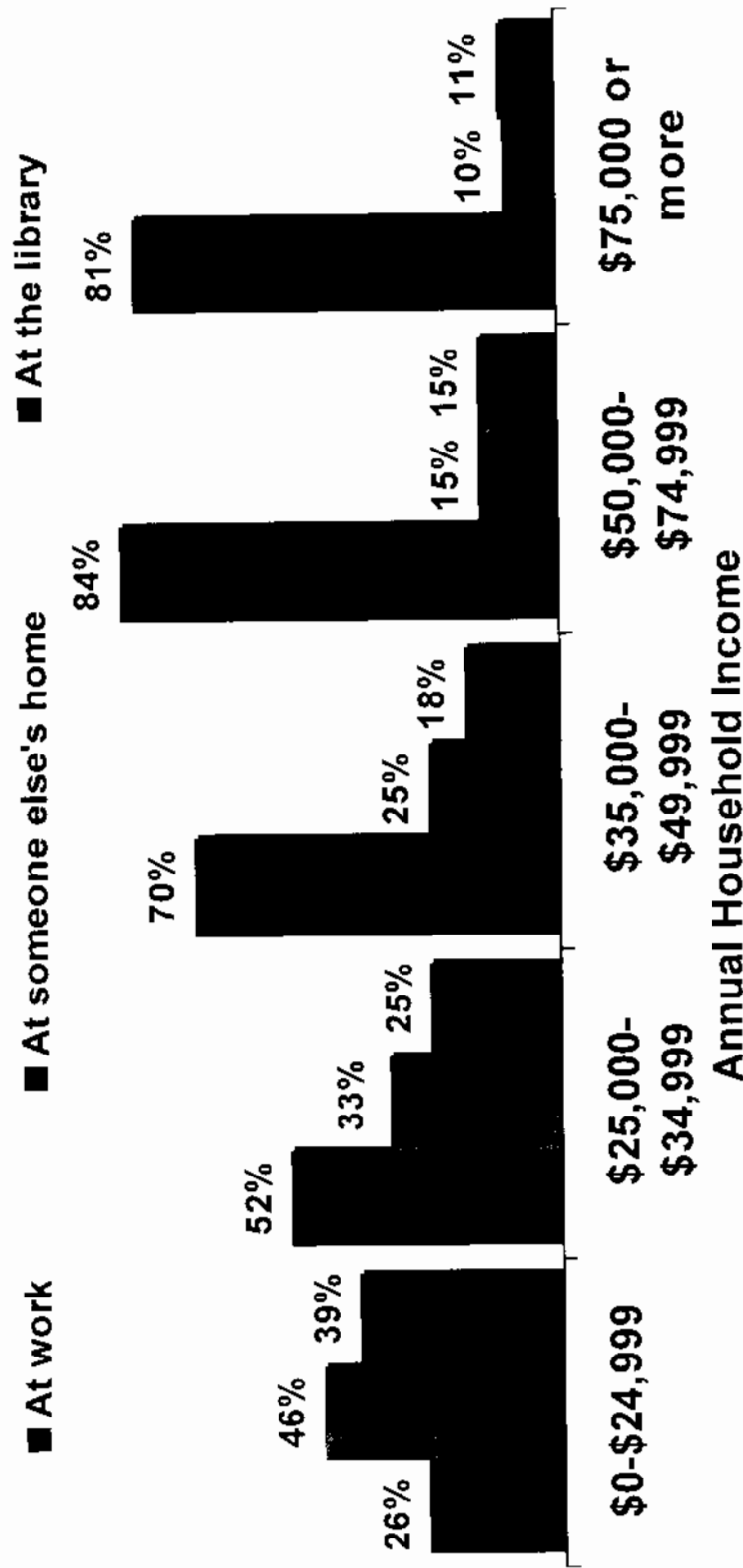
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Tennessee
THE TRAIL TO INNOVATION

Most Popular Places For Tennessee Residents to Access the Internet

Percent of Tennessee residents who access the Internet someplace other than home:



Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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Most Popular Internet Applications

Percent of Tennessee residents who have Internet service and use the following applications:

■ \$0-\$24,999

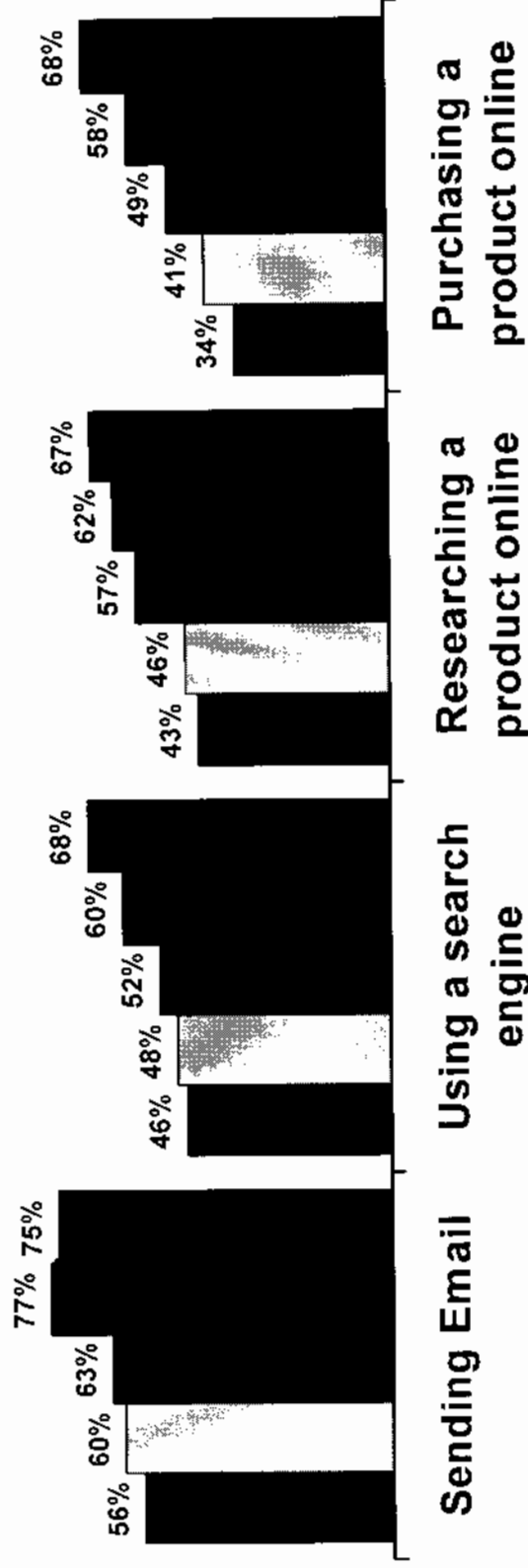


■ \$25,000-\$34,999

■ \$35,000-\$49,999

■ \$50,000-\$74,999

■ \$75,000 or more



Q. Which of the following activities do you conduct on the Internet?

(n = 7,167 TN residents with Internet service at home)

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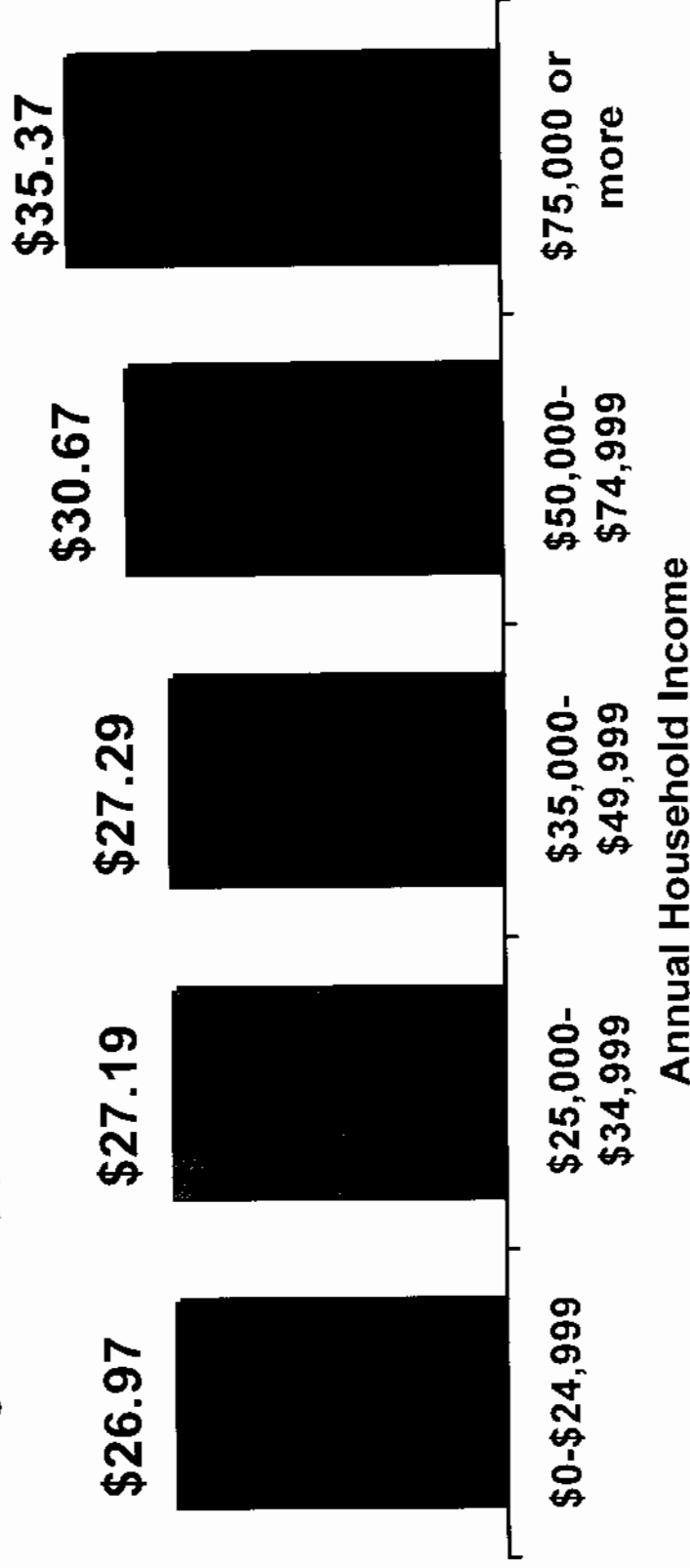
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How Much Tennessee Residents Pay for their Internet Service

Average monthly price Tennessee residents pay for home Internet service:



Statewide Average: Tennessee residents report paying an average of \$30.61 per month.

Q: What do you pay each month for your Internet service?

(n = 6,191 TN residents with Internet service at home)

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Barriers to Internet Adoption

Percent of Tennessee residents who do not have the Internet for the following reasons:

	☐ Significantly higher than the state average: ☐ Significantly lower than the state average:	\$0-\$24,999	\$25,000-\$34,999	\$35,000-\$49,999	\$50,000-\$74,999	\$75,000 or more
I don't own a computer		52%	59%	49%	40%	29%
I don't need the Internet		29%	33%	31%	33%	35%
Too expensive		17%	9%	10%	15%	8%
I can get Internet access somewhere else		7%	6%	6%	14%	8%
Broadband isn't available in my area, and I don't want dial-up.		3%	3%	6%	12%	6%
Don't know/refused		1%	0%	0%	1%	7%

Shading indicates that a value is significantly lower (pink) or higher (green) than the Tennessee state average (significance measured at a 95% confidence level)

Q: Why don't you subscribe to the Internet at home?

(n = 3,237 TN residents without Internet service at home)

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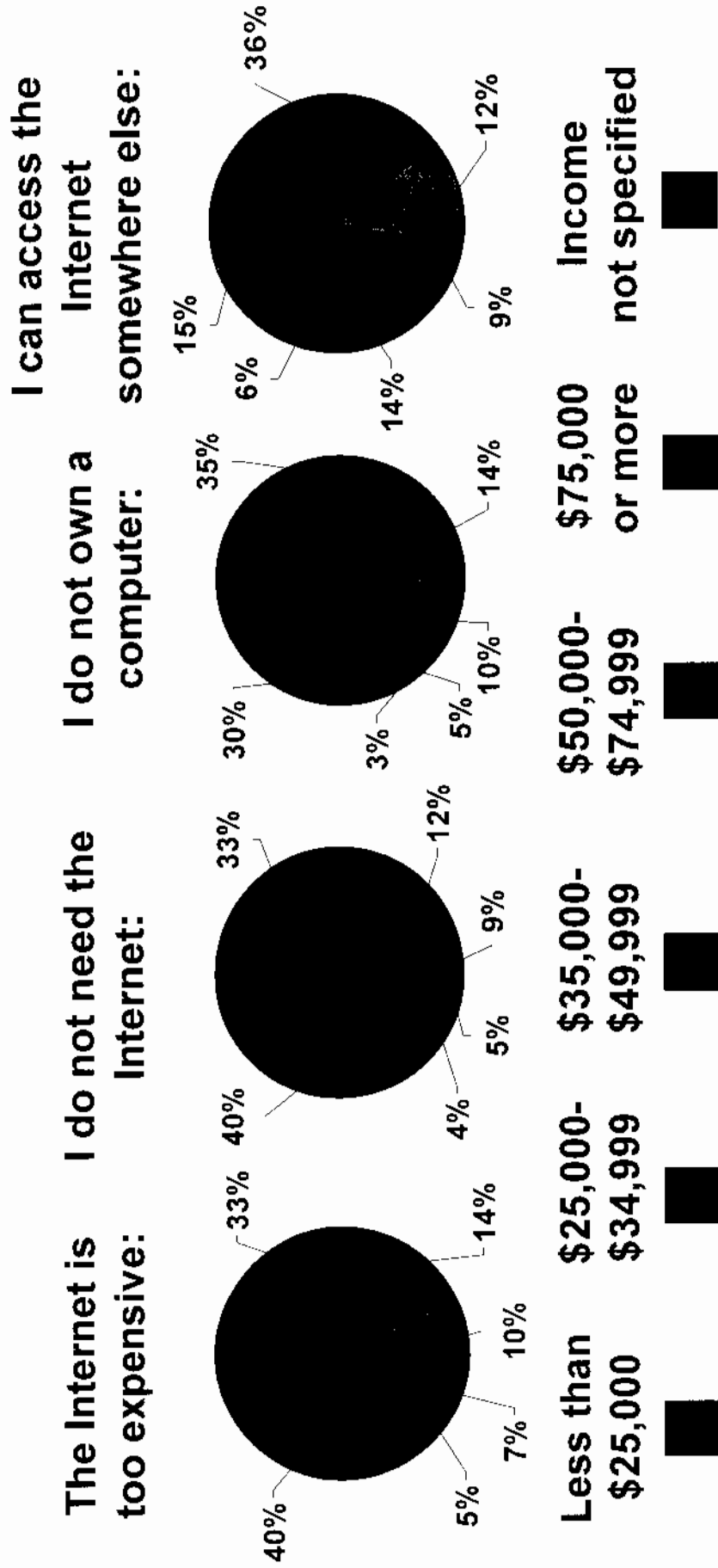
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THE TRAIL TO INNOVATION

Barriers to Internet Adoption

Income distribution of the top barriers to Internet adoption:



Q: Why don't you subscribe to the Internet at home?

(n = 3,237 TN residents without Internet service at home)

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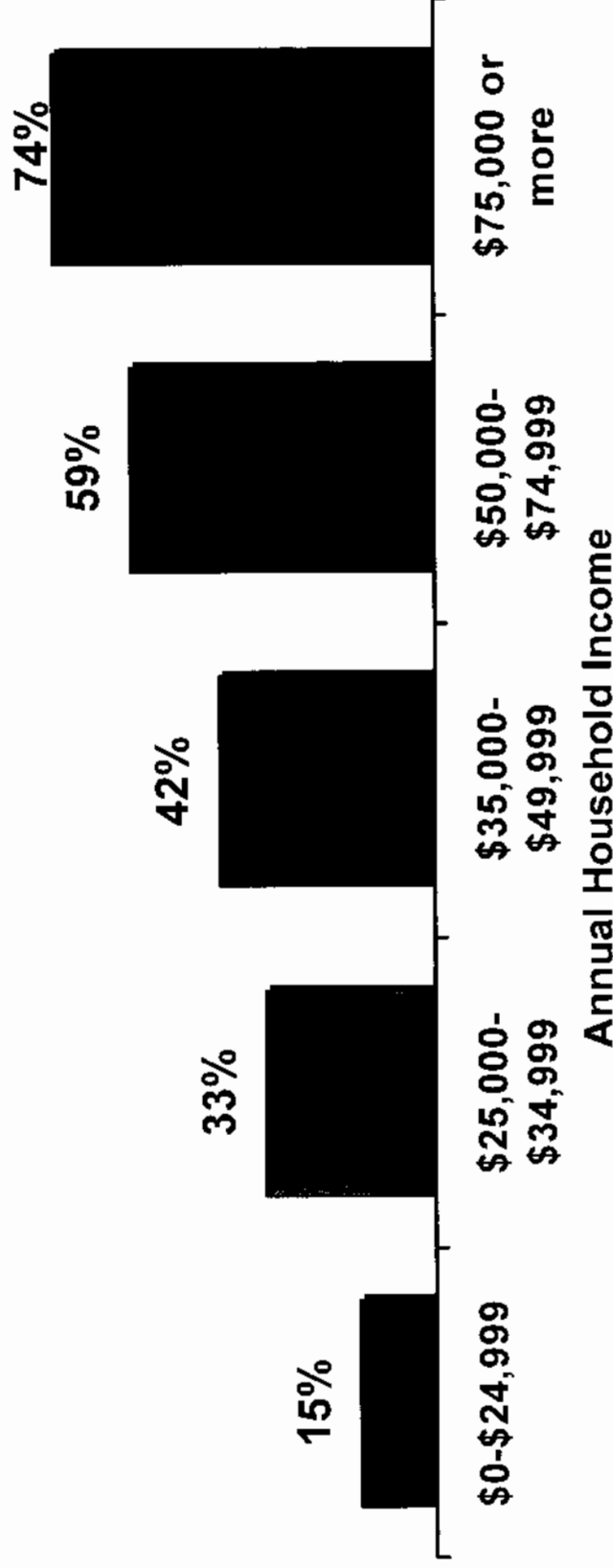
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Tennessee Residents That Have Broadband in their Household

Percent of Tennessee residents who have a broadband connection at home:



Statewide Average: 43% of all Tennessee residents have a broadband connection at home.

Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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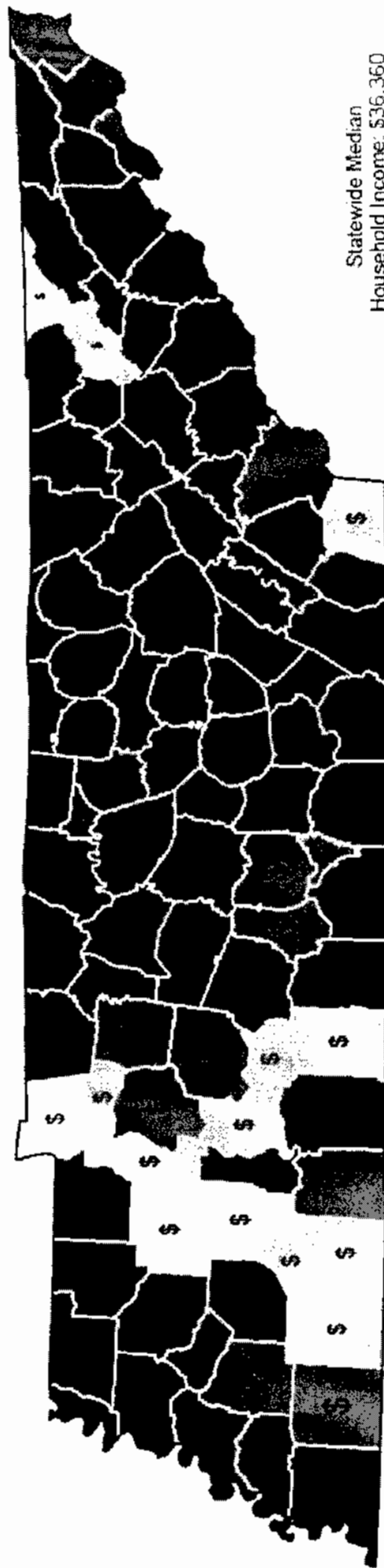
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Broadband Availability vs. Median Household Income by County

BROADBAND AVAILABILITY VS. MEDIAN HOUSEHOLD INCOME



- Broadband Availability**
- Significantly Low Availability
 - Low Availability
 - Average Availability
 - High Availability
 - Significantly High Availability
- Median Household Income**
- Significantly Lower (<\$28,000)
 - Lower (\$28,000-\$36,360)
 - Higher (\$36,360-\$53,000)
 - Significantly Higher (>\$53,000)

Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

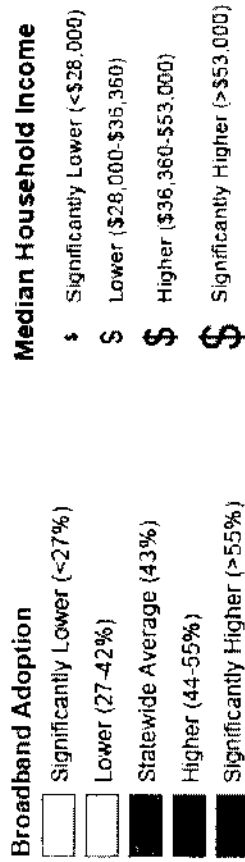
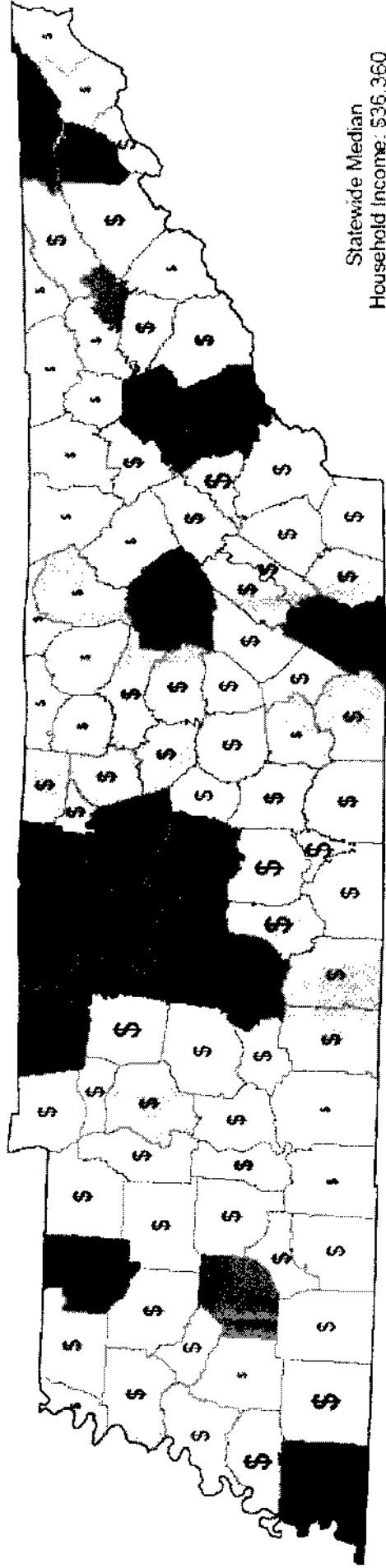
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Source: 2007 Connected Tennessee Residential Technology Assessment



Broadband Adoption vs. Median Household Income by County

BROADBAND ADOPTION VS. MEDIAN HOUSEHOLD INCOME



Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

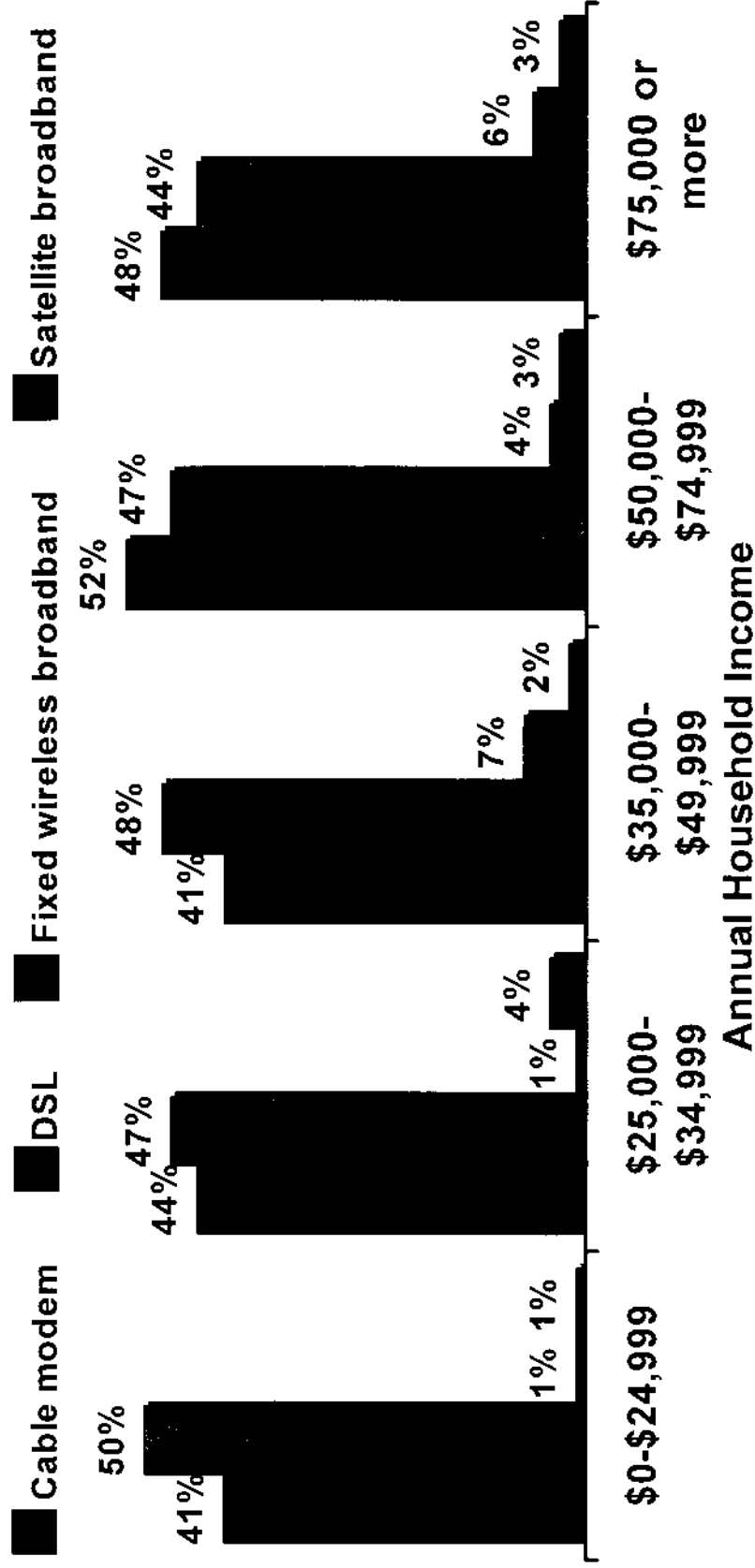
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Top Methods of Broadband Access

Percent of Tennessee residents who use broadband at home:



Q. Which of the following describes the broadband service you have at home?

(n = 4,035 TN residents with broadband service at home)

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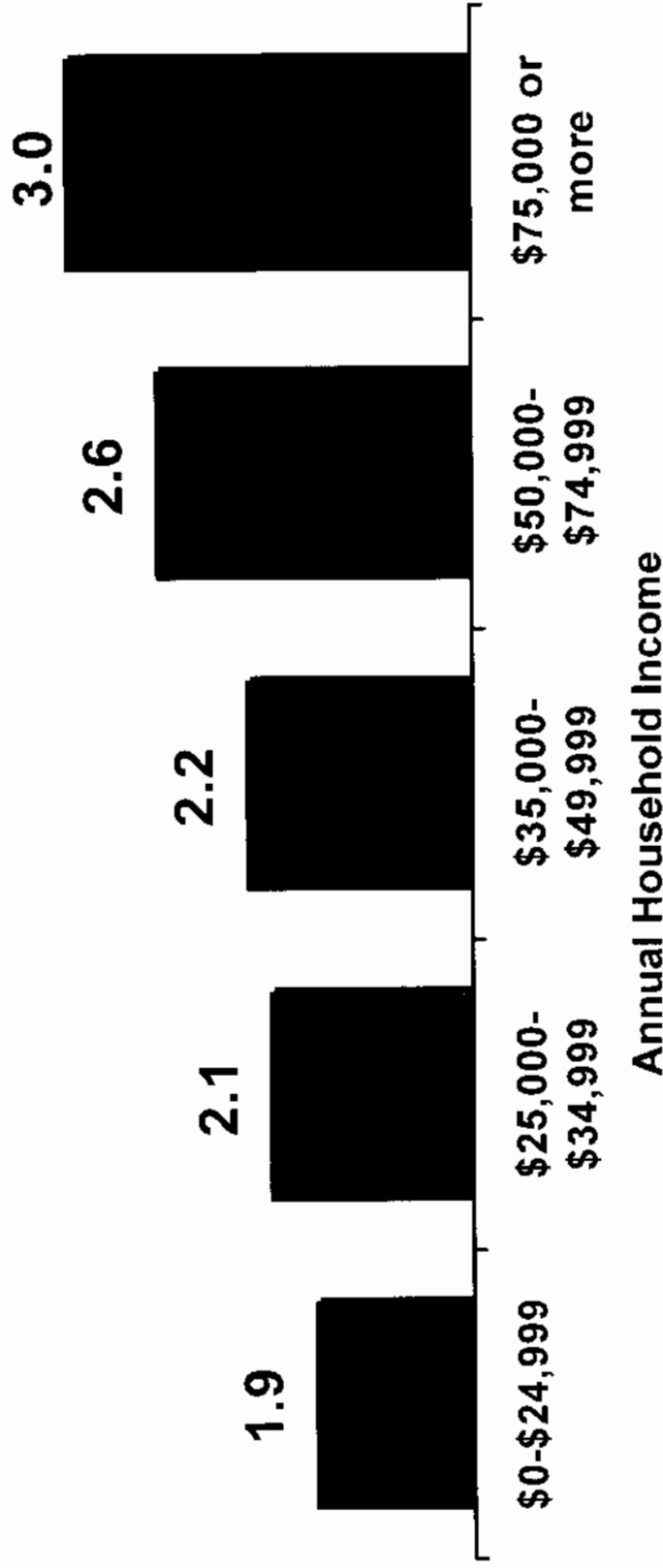
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How Long Tennessee Residents Have Had Broadband in their Household

Average number of years Tennessee residents have accessed broadband from home:



**Statewide Average: Tennessee residents adopted broadband 2.6
years ago on average.**

Q: When did you subscribe to broadband service?

(n = 4,053 TN residents with broadband service at home)

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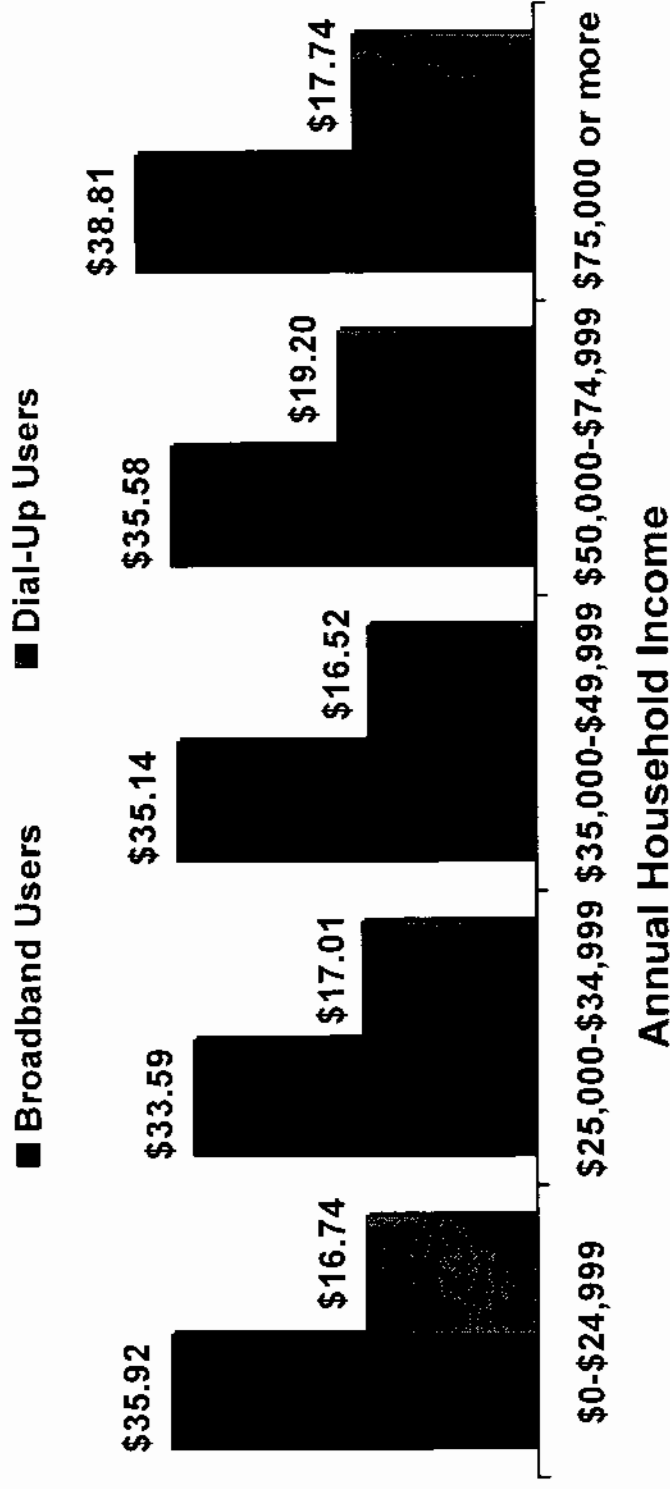
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How Much Tennessee Residents Pay for Internet

Average monthly cost that Tennessee residents pay for broadband and dial-up at home:



Statewide Average: Tennessee residents pay an average of \$36.65 per month for home broadband access and \$17.82 for dial-up.

Q: What do you pay each month for your Internet service?
(n = 4,053 TN residents with broadband service at home)
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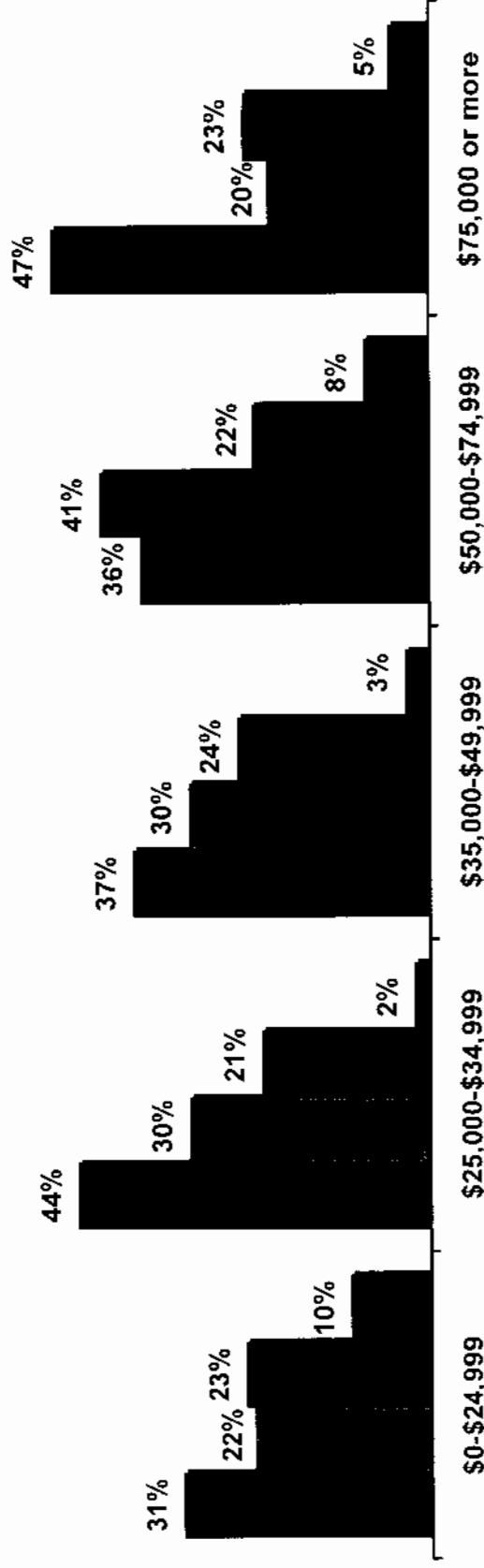
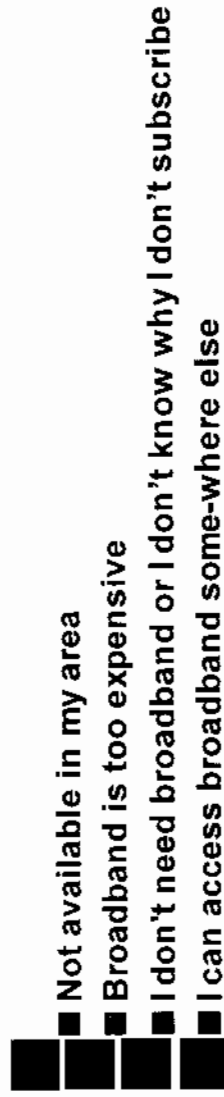
Source: 2007 Connected Tennessee Residential Technology Assessment
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Top Barriers to Broadband Adoption

Percent of Tennessee residents with dial-up service at home:



Q: Why don't you subscribe to broadband at home?

(n = 1,787 TN residents who rely on dial-up for Internet service at home)

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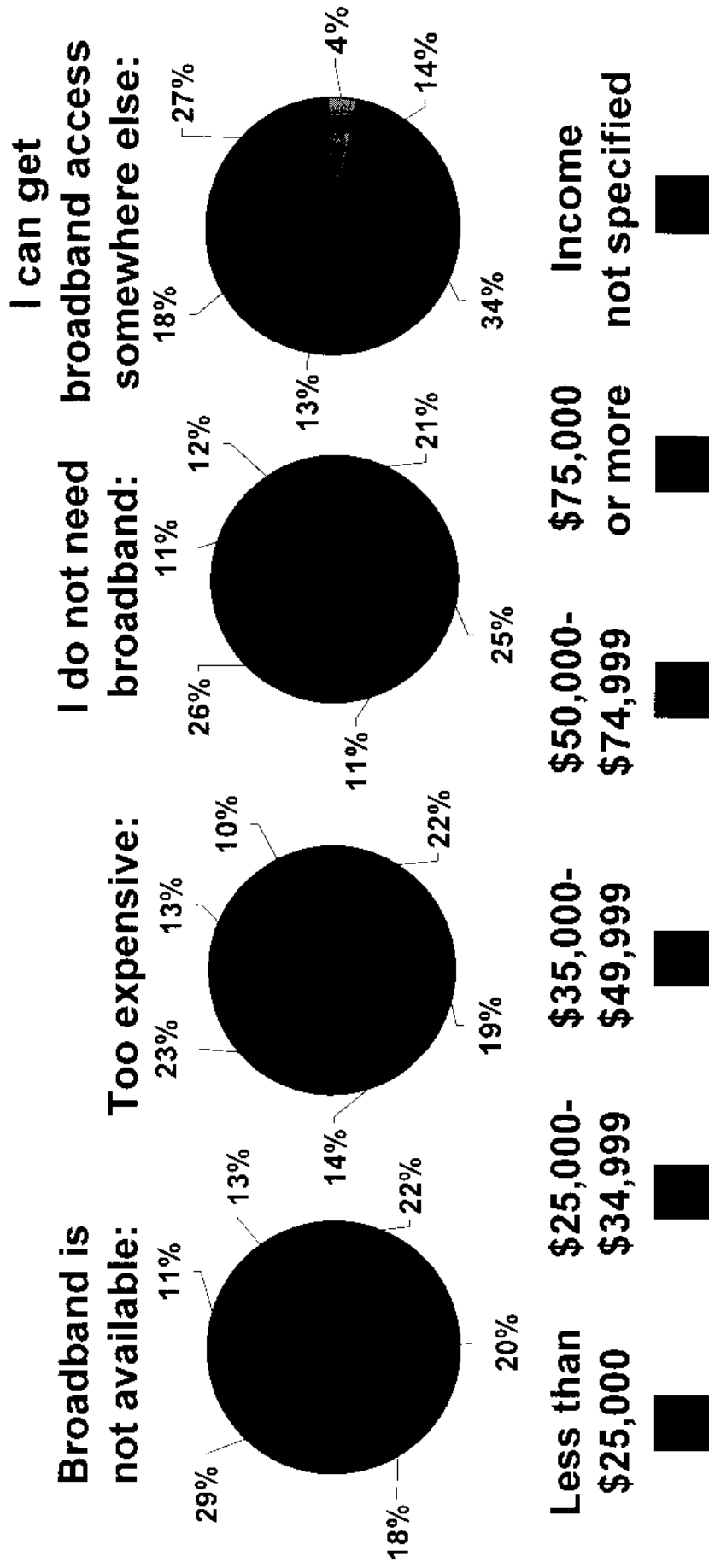
120

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Barriers to Broadband Adoption

Income distribution of the top barriers to broadband adoption:



Q: Why don't you subscribe to broadband at home?

(n = 1,787 TN residents with dial-up Internet service at home)

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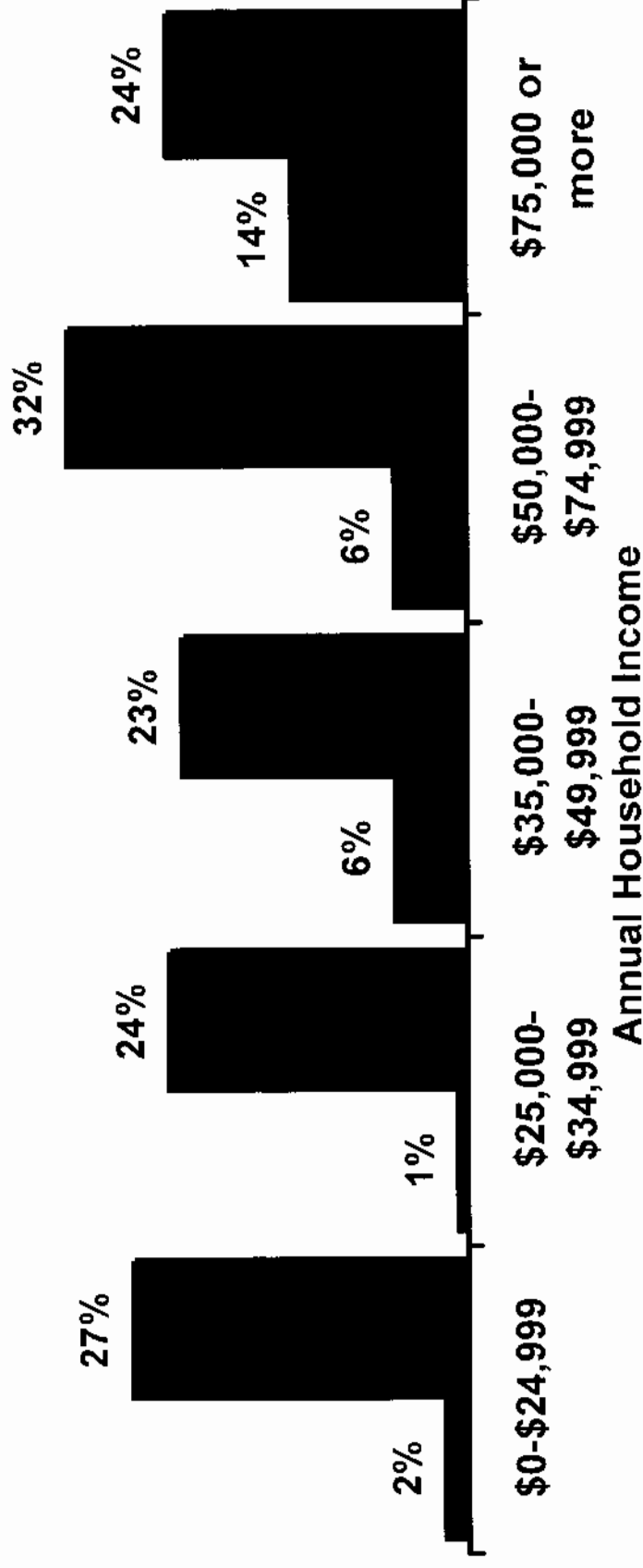
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Tennessee Residents and Telework

Percent of Tennessee residents employed full or part time who:

■ Regularly telework now

■ Would telework if allowed



Q: Do you regularly work from home through a broadband connection, commonly known as teleworking?

(n = 5,487 TN residents employed full or part time)

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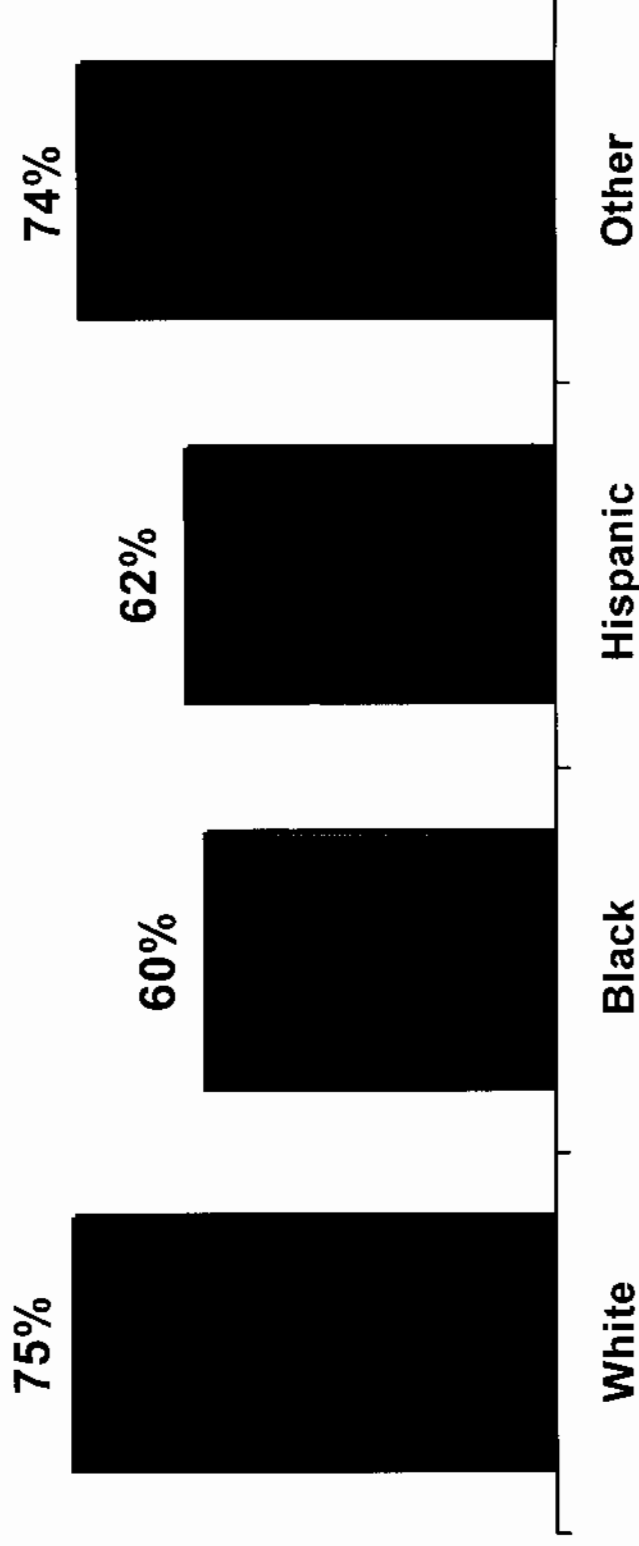
Residential Technology Assessment by Race



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Tennessee Residents with a Computer at Home

Percent of Tennessee residents who have a computer at home:



Statewide Average: 71% of Tennessee residents report having a personal computer at home.

Q: Does your household have a computer?

(n = 9,513 TN residents)

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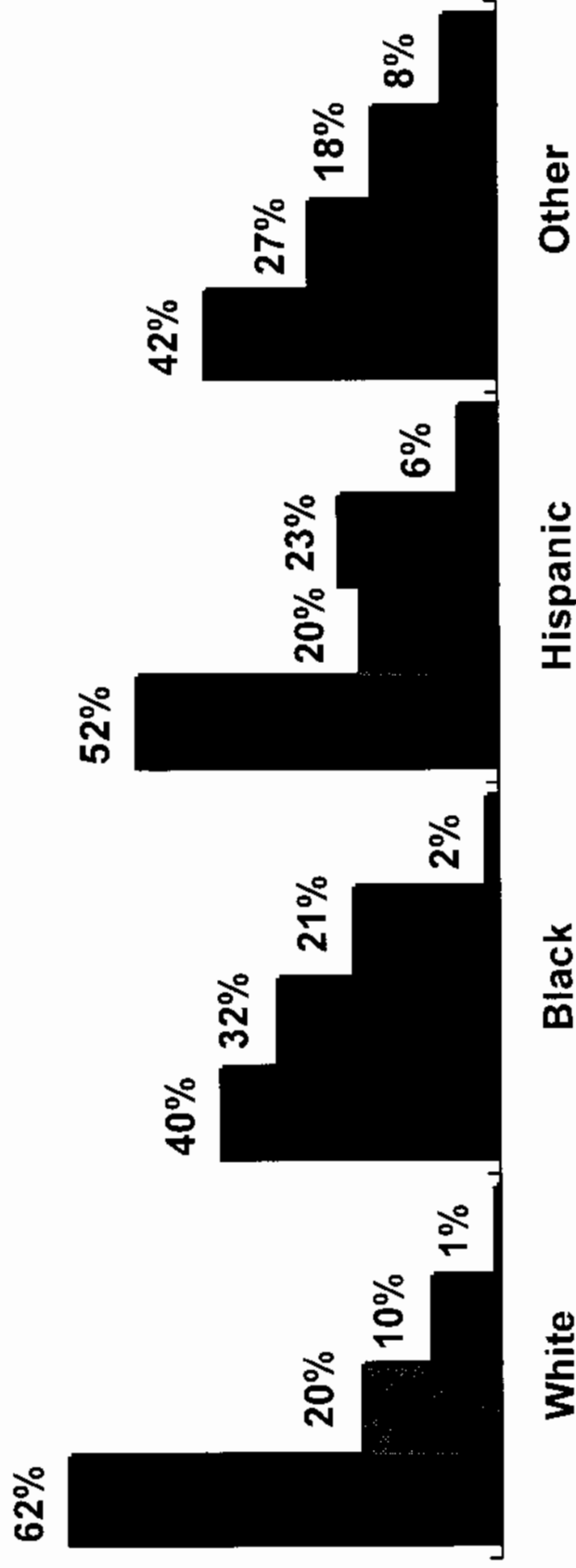


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Barriers to Computer Ownership

Top responses given when asked why Tennessee residents do not own a computer:

- I don't need a computer
- Use a Computer somewhere else
- Too expensive
- Don't know/refused



Q: Why don't you have a computer at home?

(n = 2,735 TN residents with no computer in their household)

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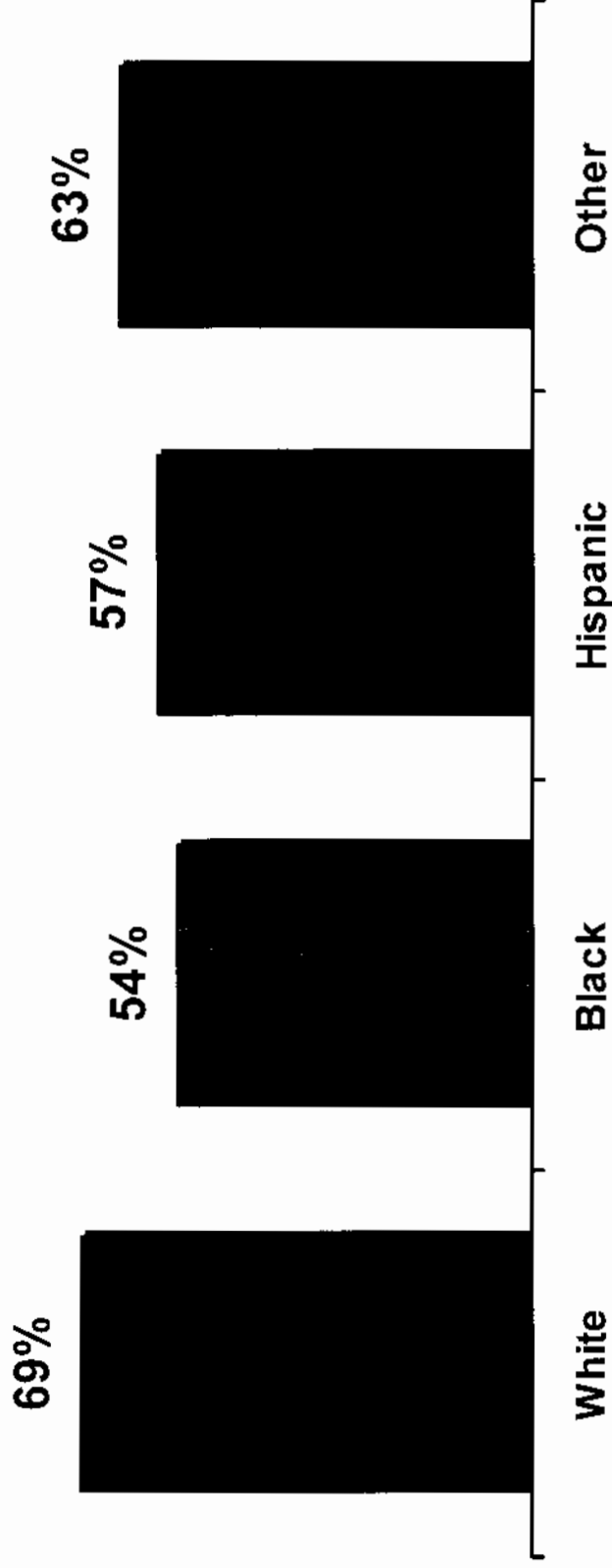
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Tennessee Residents with an Internet Connection at Home

Percent of Tennessee residents who have an Internet connection at home:



Statewide Average: 65% of Tennessee residents report having an Internet connection at home.

Q: Do you have an Internet connection at home?

(n = 9,513 TN residents)

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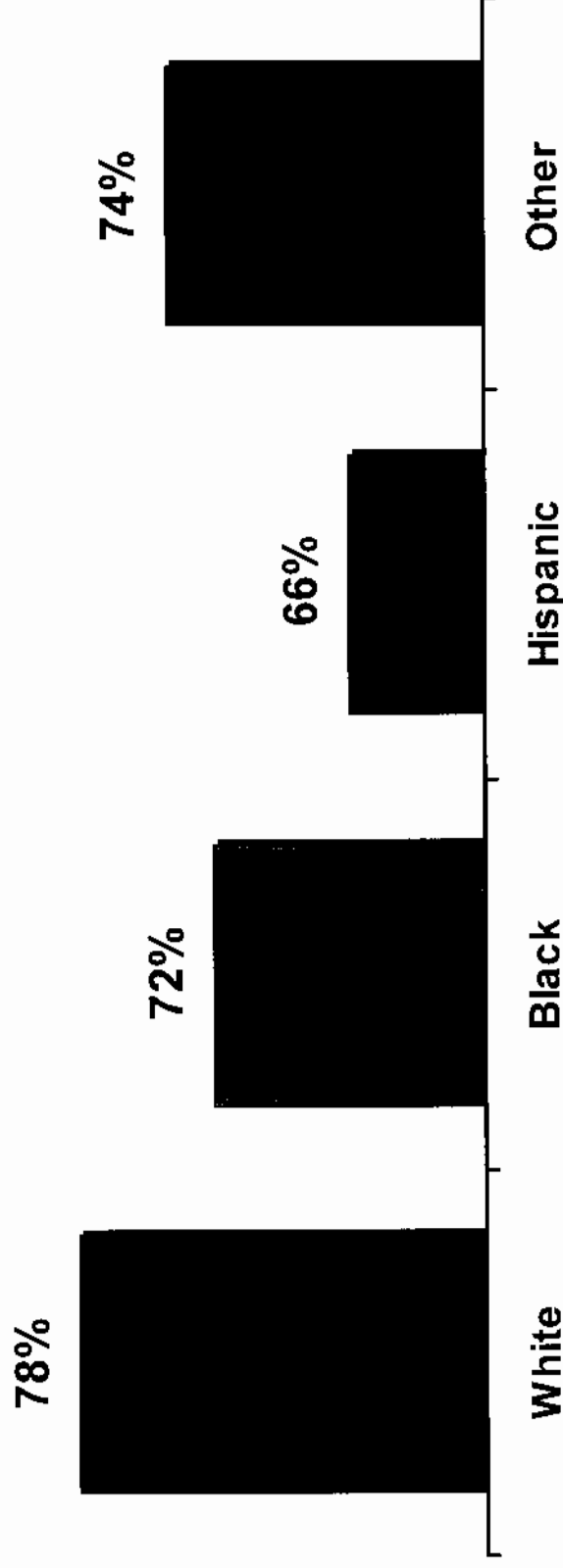
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Tennessee Residents who Access the Internet from Home or Some Other Place

Percent of Tennessee residents who access the Internet from home or some other place:



**Statewide Average: 75% of Tennessee residents report they
access the Internet from home or someplace else.**

Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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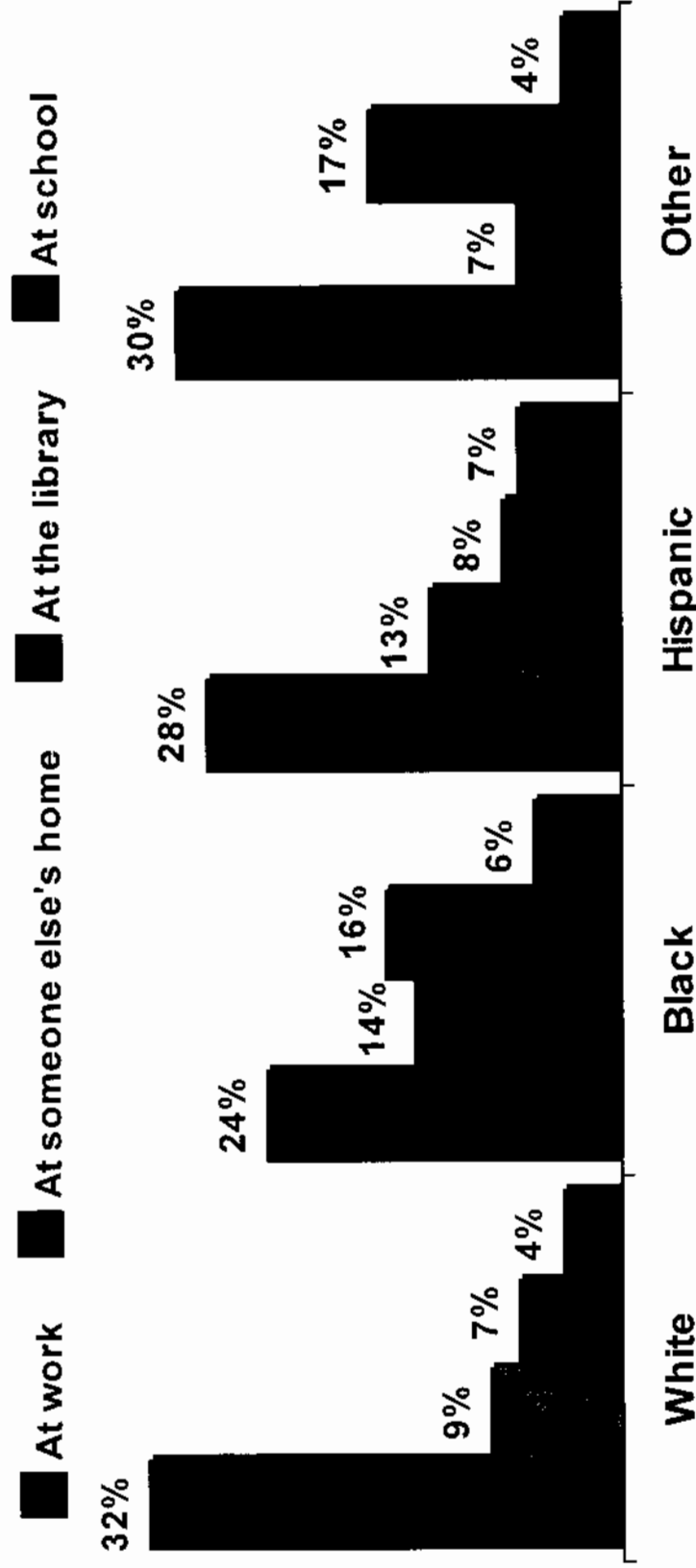
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Most Popular Places For Tennessee Residents to Access the Internet

Percent of Tennessee residents who access the Internet someplace other than home:



Q: At what locations do you have access to the Internet?

(n = 9,513 TN residents)

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Top Ten Internet Applications

White

1. Sending e-mail
2. Using a search engine
3. Researching a product online
4. Purchasing a product online
5. Researching or booking travel
6. Sending or receiving photos
7. Searching for health or medical information
8. Reading news online
9. Searching for community event information
10. Online Banking

Black

1. Sending e-mail
2. Researching a product online
3. Purchasing a product online
4. Searching for health or medical information
5. Reading news online
6. Using a search engine
7. Searching for community event information
8. Researching or booking travel
9. Searching for a job
10. Downloading music

Q: Which of the following activities do you conduct on the Internet?

(n = 7,167 TN residents with Internet service at home)

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Source: 2007 Connected Tennessee Residential Technology Assessment



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Top Ten Internet Applications

Hispanic

1. Sending e-mail
2. Researching a product online
3. Researching or booking travel
4. Sending or receiving photos
5. Using a search engine
6. Reading news online
7. Purchasing a product online
8. Searching for community event information
9. Research for schoolwork
10. Playing games online

Q: Which of the following activities do you conduct on the Internet?

(n = 7,167 TN residents with Internet service at home)

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Other

1. Using a search engine
2. Sending e-mail
3. Purchasing a product online
4. Researching or booking travel
5. Researching a product online
6. Sending or receiving photos
7. Reading news online
8. Online Banking
9. Searching for health or medical information
10. Watching videos, movies, or TV shows online

Source: 2007 Connected Tennessee Residential Technology Assessment



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How Much Tennessee Residents Pay for their Internet Service

Average monthly price Tennessee residents pay for home Internet service:



Statewide Average: Tennessee residents report paying an average of \$30.61 per month.

Q: What do you pay each month for your Internet service?

(n = 6,191 TN residents with Internet service at home)

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Barriers to Internet Adoption

Percent of Tennessee residents who do not have the Internet for the following reasons:



Q: Why don't you subscribe to the Internet at home?

(n = 3,237 TN residents without Internet service at home)

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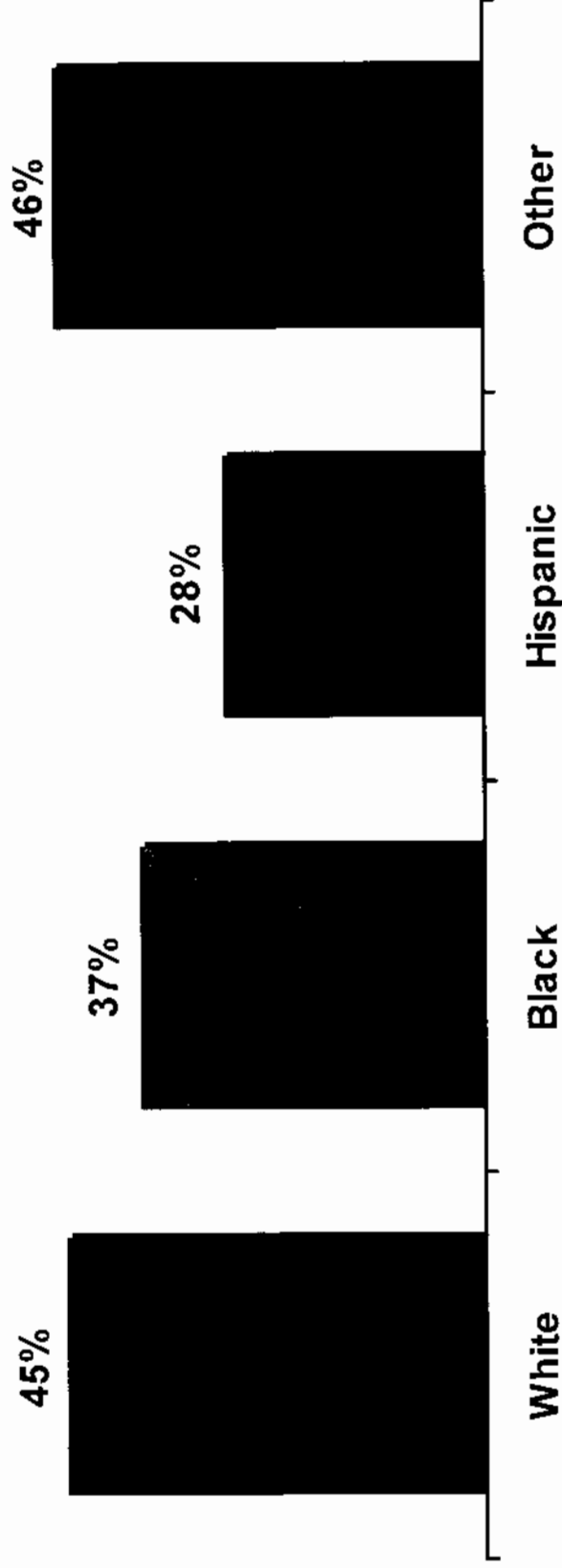
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Tennessee Residents That Have Broadband in their Household

Percent of Tennessee residents who use broadband from home:



Statewide Average: 43% of all Tennessee residents have a broadband connection at home.

Q: Which of the following describe the type of Internet service you have at home?

(n = 9,513 TN residents)

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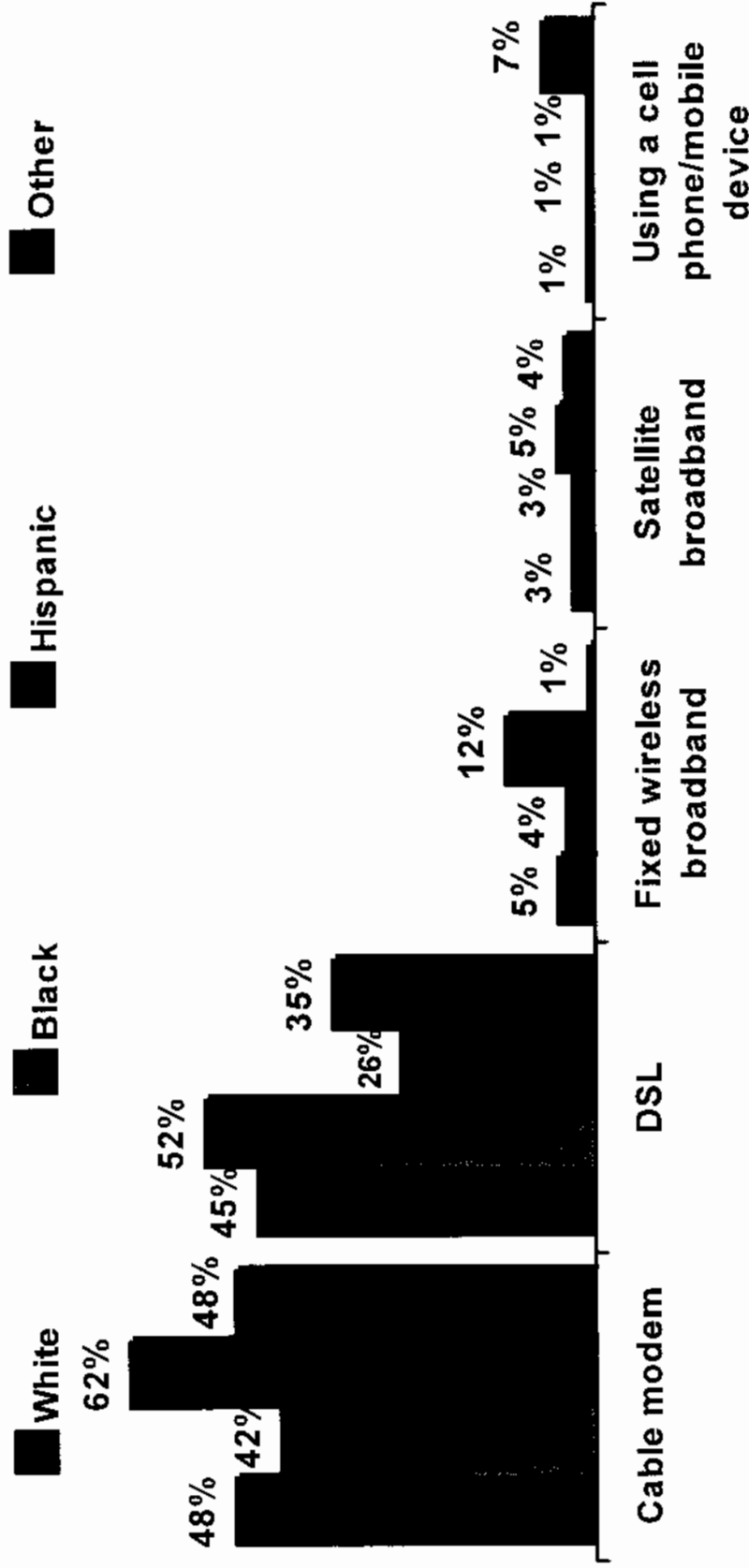
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Top Methods of Broadband Access

Percent of Tennessee residents with a broadband connection at home:



Q: Which of the following describes the broadband service you have at home?

(n = 4,035 TN residents with broadband service at home)

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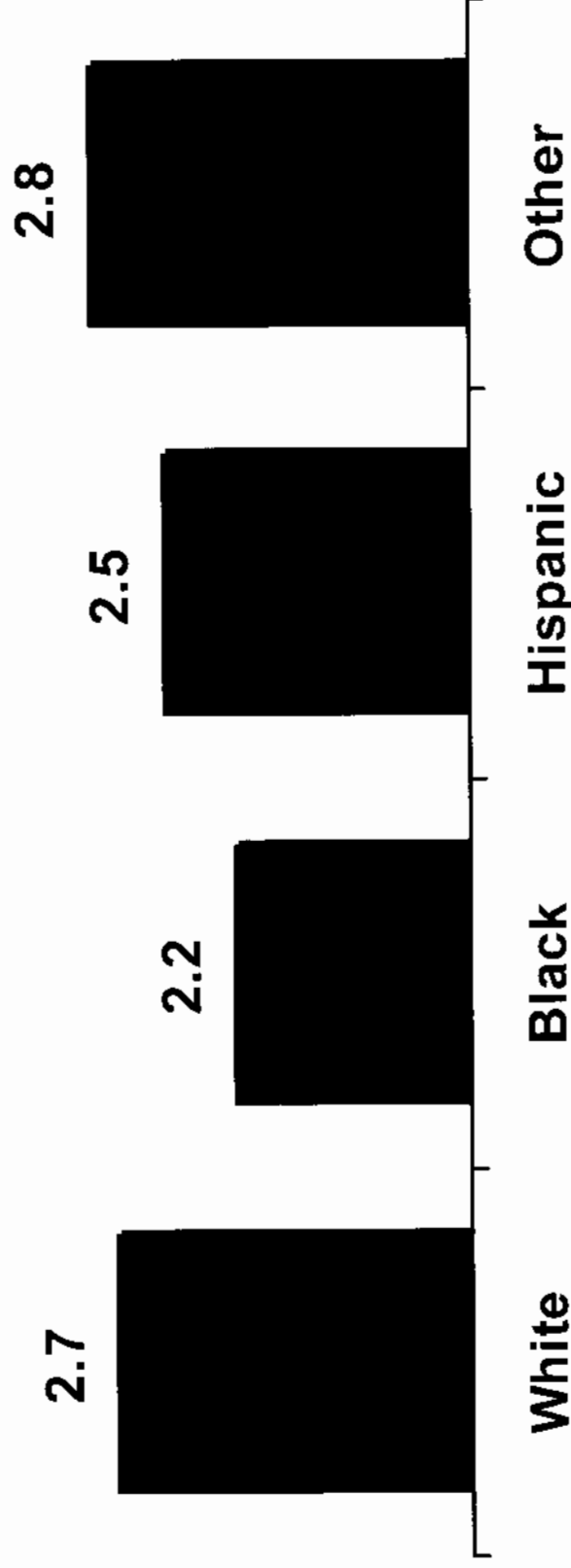
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How Long Tennessee Residents Have Had Broadband in their Household

Average number of years Tennessee residents have had a broadband connection at home:



**Statewide Average: Tennessee residents adopted broadband 2.6
years ago on average.**

Q: When did you subscribe to broadband service?

(n = 4,053 TN residents with broadband service at home)

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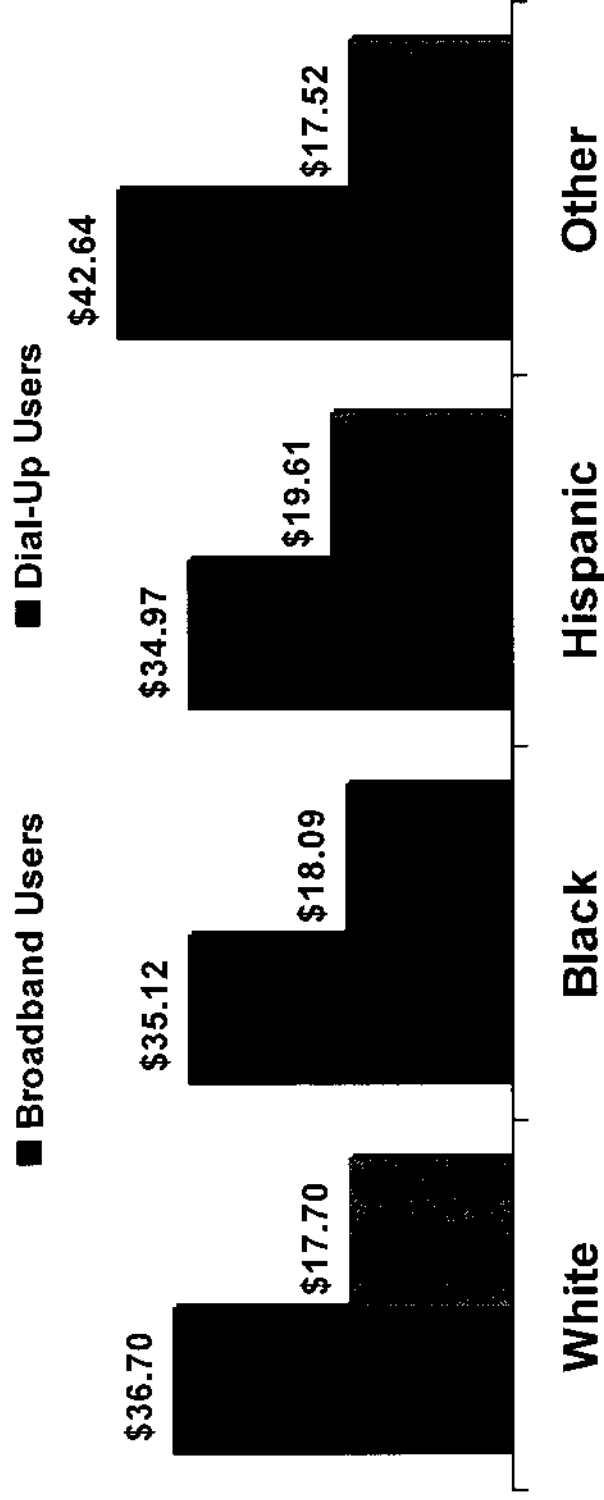
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How Much Tennessee Residents Pay for Internet

Average monthly cost that Tennessee residents pay for broadband and dial-up connections at home:



Statewide Average: Tennessee residents pay an average of \$36.65 per month for home broadband access and \$17.82 for dial-up.

Q: What do you pay each month for your Internet service?

(n = 6,191 TN residents with either broadband or dial-up service at home)

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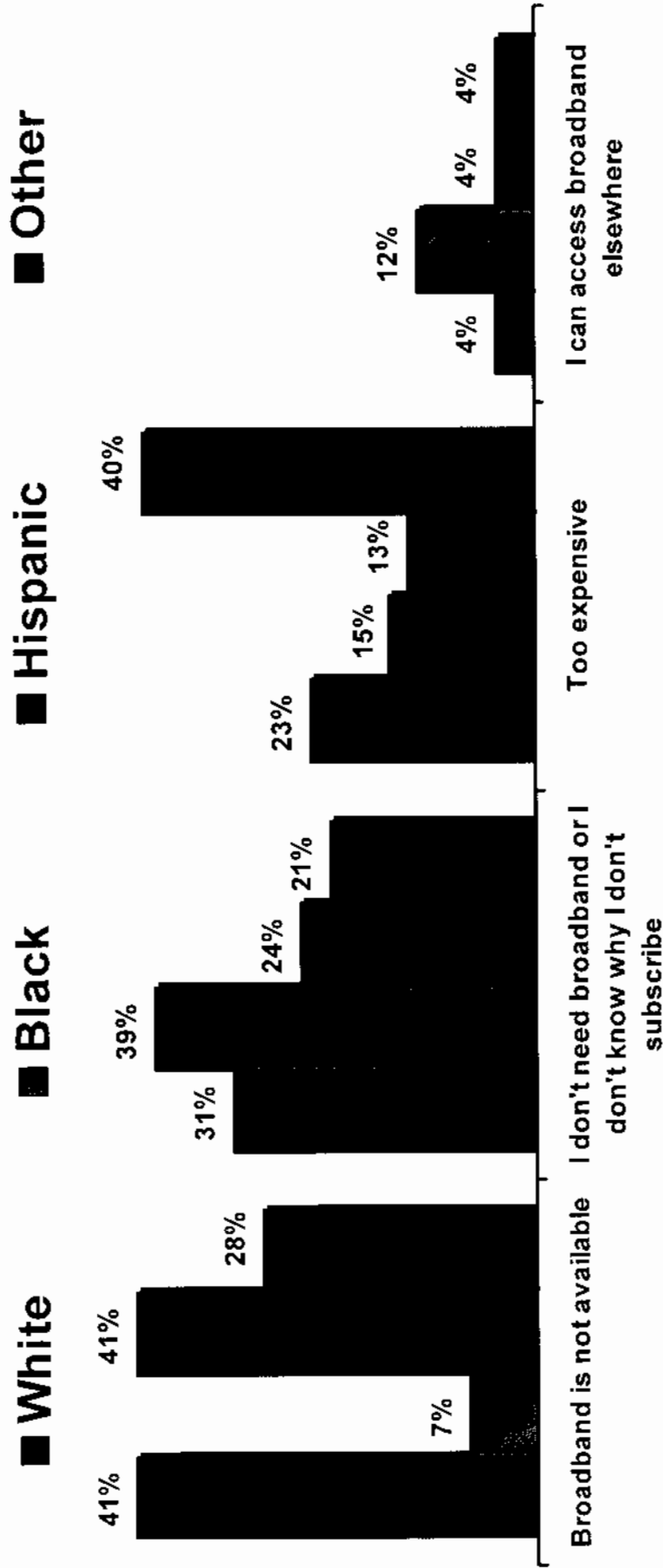
Source: 2007 Connected Tennessee Residential Technology Assessment



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Top Barriers to Broadband Adoption

Percent of Tennessee residents with dial-up Internet service at home:



Q: Why don't you subscribe to broadband at home?

(n = 1,787 TN residents with dial-up Internet service at home)

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Source: 2007 Connected Tennessee Residential Technology Assessment

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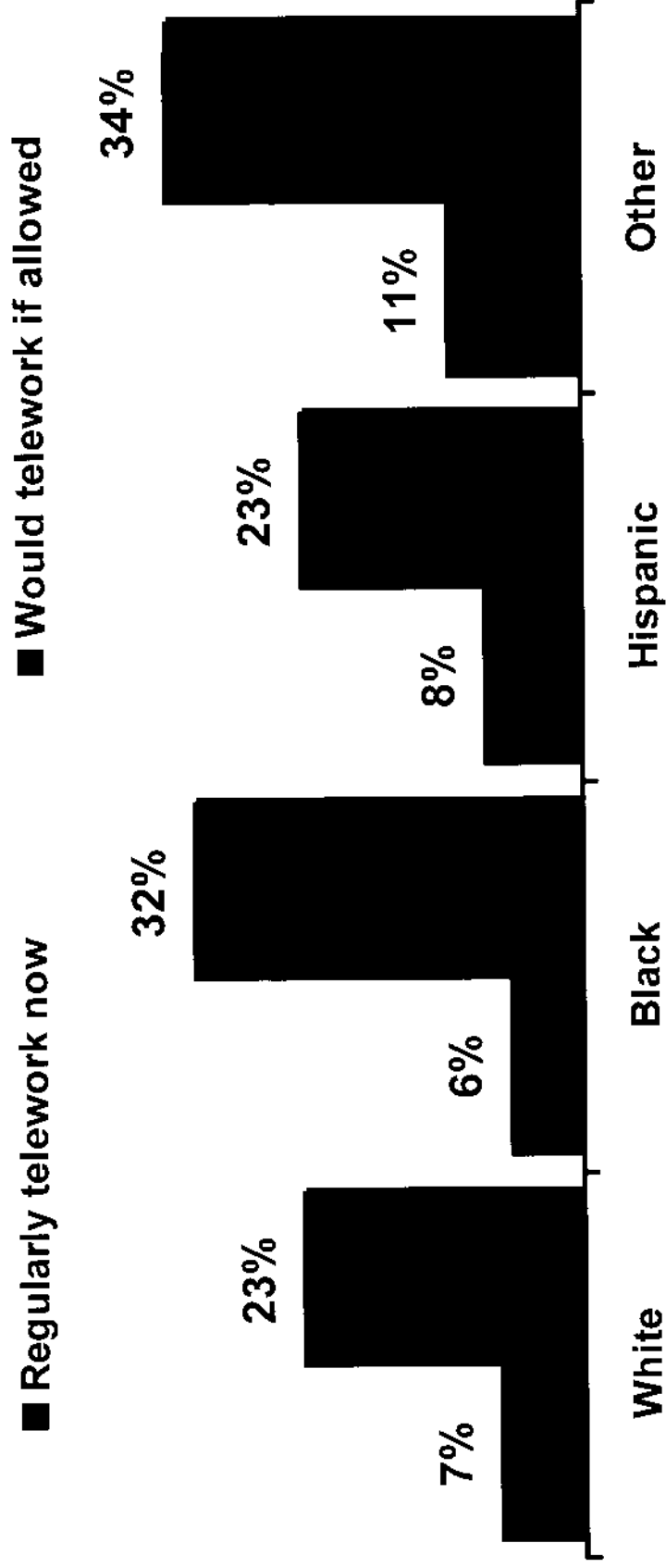
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Tennessee Residents and Telework

Percent of Tennessee residents employed full or part time who:



Q: Do you regularly work from home through a broadband connection, commonly known as teleworking?

(n = 5,487 TN residents employed full or part time)

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Source: 2007 Connected Tennessee Residential Technology Assessment

Research Methodology



Methodology Overview

- The Connected Tennessee Residential Survey interviewed 9,513 adults by telephone in July 2007. Data were collected by Wilkerson and Associates in Louisville, Kentucky.
- This survey was designed to measure consumer technology indicators at the county levels for all 95 counties in Tennessee. Approximately 100 interviews were completed in each county.
- The questionnaire screened respondents to include only adults age 18 or older, with quotas set by gender and age to ensure adequate representation of all adults in each county.
- Weights were applied to each county's survey sample to match the most recent population Census estimates by age and gender.
- Sampling Error:
 - County Level (n = approximately 100): +/- 9.8% at the 95% confidence level.
 - Statewide (n = 9,513): +/- 1.0% at the 95% confidence level.



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Attribution

Connected Nation Research

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Wilkerson and Associates

(502) 459-3133

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Lucidity Research, LLC

(410) 848-1641

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Contact Information

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Executive Director of Connected Tennessee

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(615) 242-9508

CAPD EXHIBIT: MDC 2

Summary of Population, Median Income, Poverty Level

By County Within Embarq Service Territory

CAPD Exhibit MDC 2

County:	Population	**	Median Household Income*	Poverty Rates*
Green County	65,945	\$	33,917	15.3%
Johnson County	18,043	\$	25,628	21.8%
Carter County	59,157	\$	29,834	18.3%
Washington County	114,316	\$	36,373	14.9%
Unicoi County	17,663	\$	33,704	14.8%
Sullivan County	153,239	\$	36,562	14.0%

* = Tennessee Selected Statistics (2004)

** = 2006 Estimate (Tn Selected Statistics)

6/27/2008

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CAPD EXHIBIT: MDC 3



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Technology Assessment of Tennessee Residential Consumers January 2008



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Demographics of Tennessee Technology Adopters

Tennessee residents with:

	A cellular phone	A home computer	Home Internet service	Home dial-up service	Home broadband service	Voice over Internet Protocol (VoIP)
All Tennessee adults	76%	76%	70%	19%	50%	2%
Residents age 18-34				22%		4%
Residents age 65 or older	59%	47%	38%	11%	25%	0%
Married residents				21%		3%
Residents with children at home				23%		3%
Employed full-time or part- time				23%		4%
Disabled residents	53%	42%	37%	14%	25%	0%
College graduates				17%		
Household incomes less than \$25,000 per year	48%	45%	35%	19%	16%	0%

Significantly* higher than the state average: ■

Significantly* lower than the state average: ■

*(significance measured at a 95% confidence level)

Source: Jan 2008 Connected Tennessee Residential Technology Assessment
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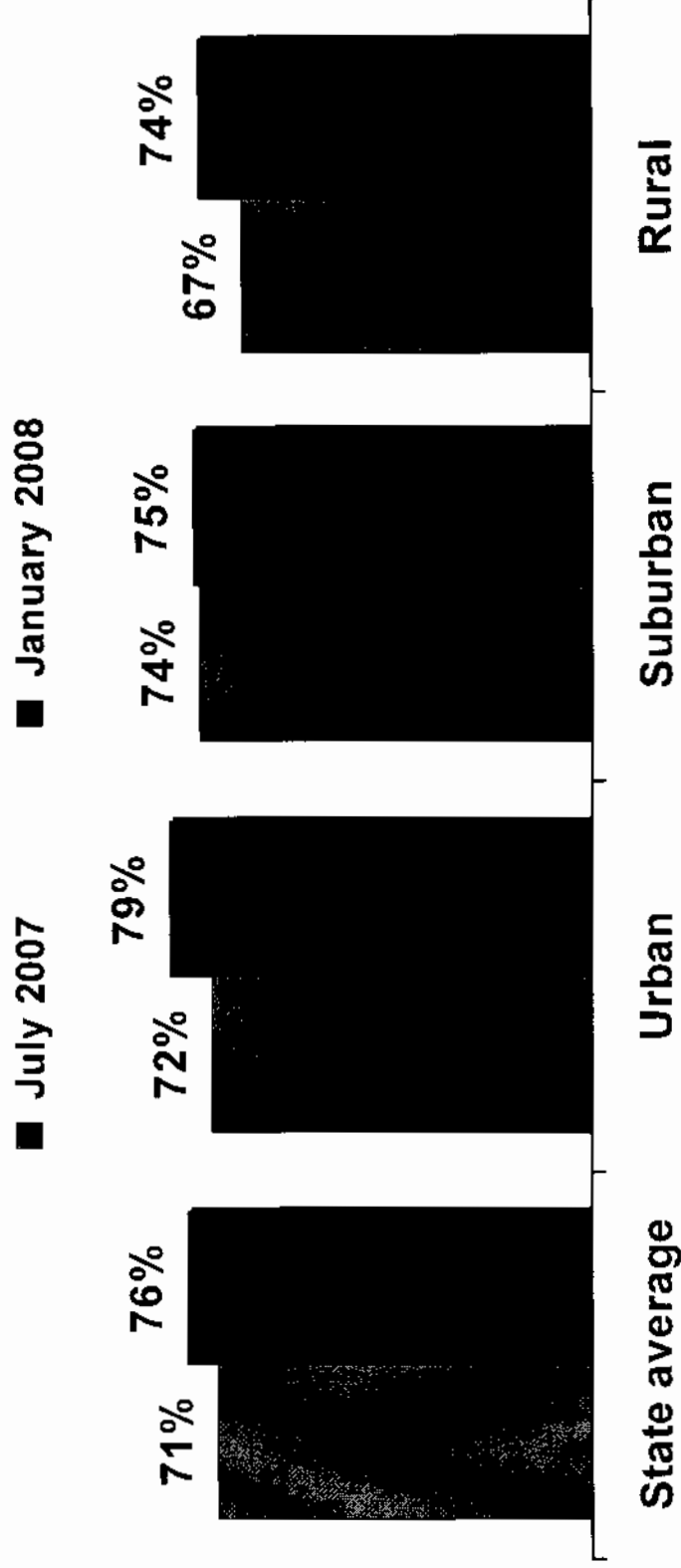
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Computer and Internet Adoption

Trends in Computer Ownership by Urban-Rural Classification

Percent of Tennessee residents with a computer:



Q: Does your household have a computer?

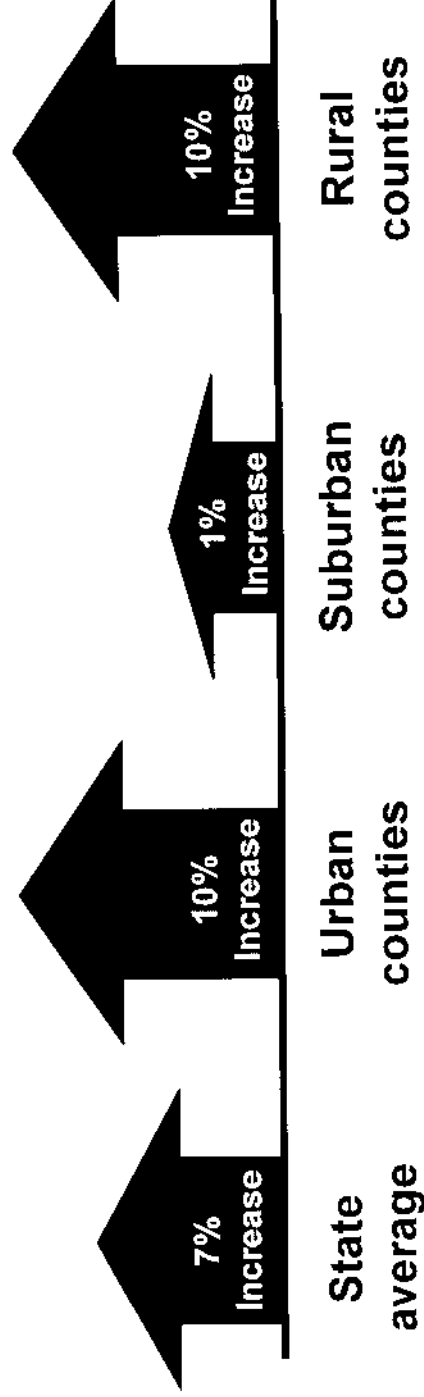
(n = 1,106 TN residents)

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Source: Jan 2008 Connected Tennessee Residential Technology Assessment

Trends in Computer Ownership by Urban-Rural Classification

Percent change in computer ownership from July 2007 to January 2008:



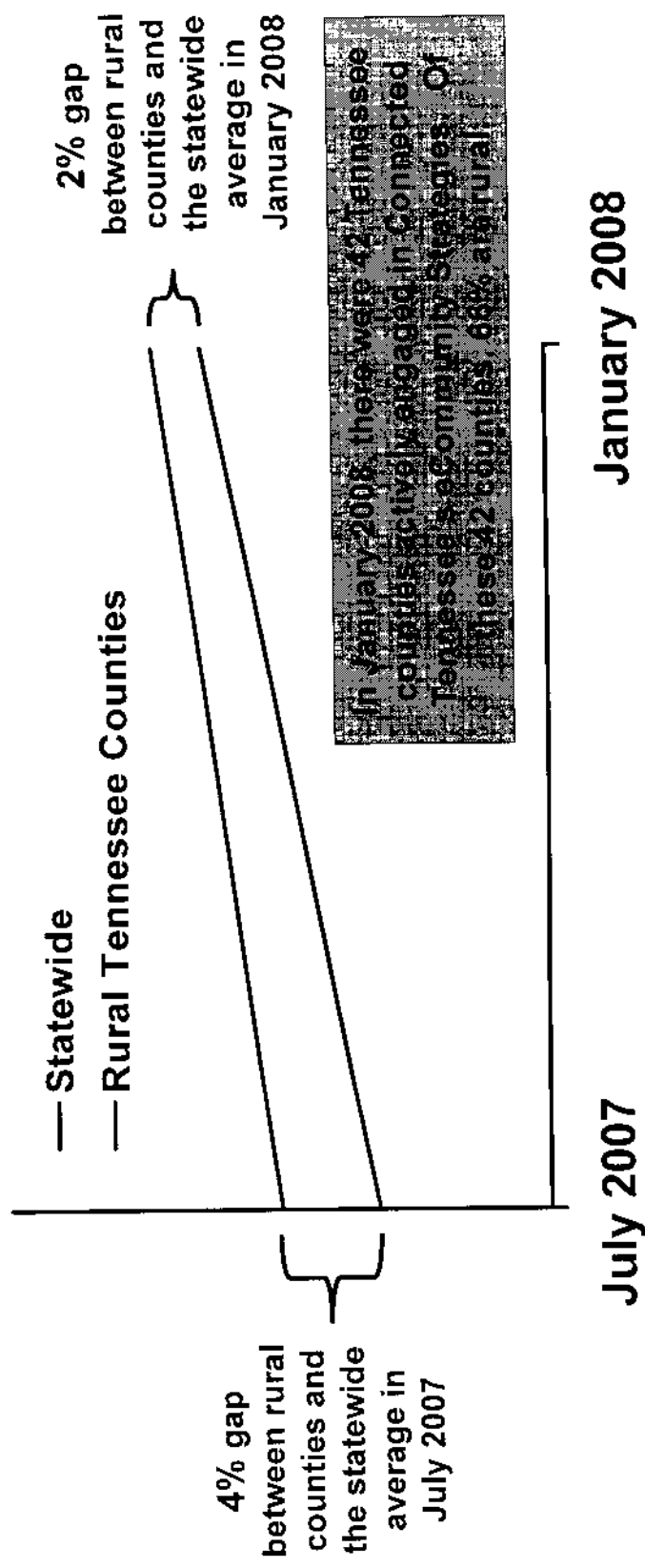
Q: Does your household have a computer?
(n = 1,106 TN residents)
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Trends in Rural Computer Ownership

Percent of Tennessee residents who own a computer:



Q: Does your household have a computer?

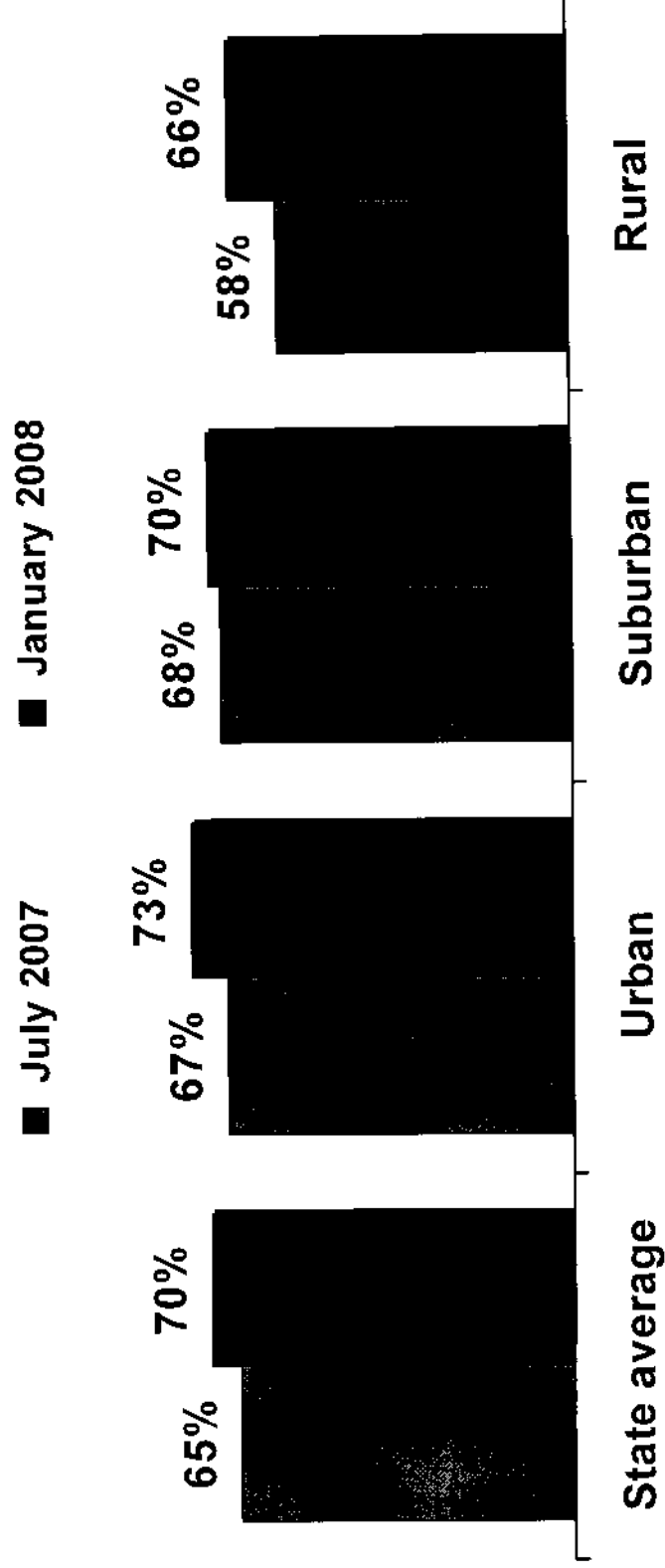
(n = 1,106 TN residents)

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Trends in Internet Adoption by Urban-Rural Classification

Percent of Tennessee residents with Internet service at home:



Q: Do you have an Internet connection at home?

(n = 1,106 TN residents)

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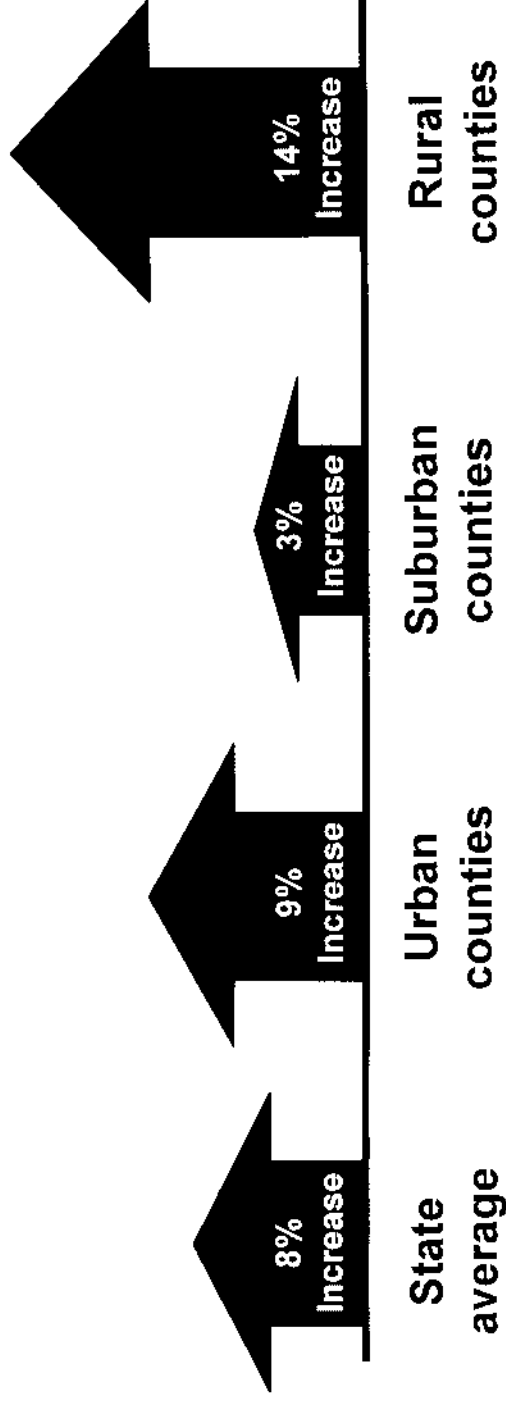
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Trends in Internet Adoption by Urban-Rural Classification

Percent change in Internet adoption from July 2007 to January 2008:



Q: Do you have an Internet connection at home?

(n = 1,106 TN residents)

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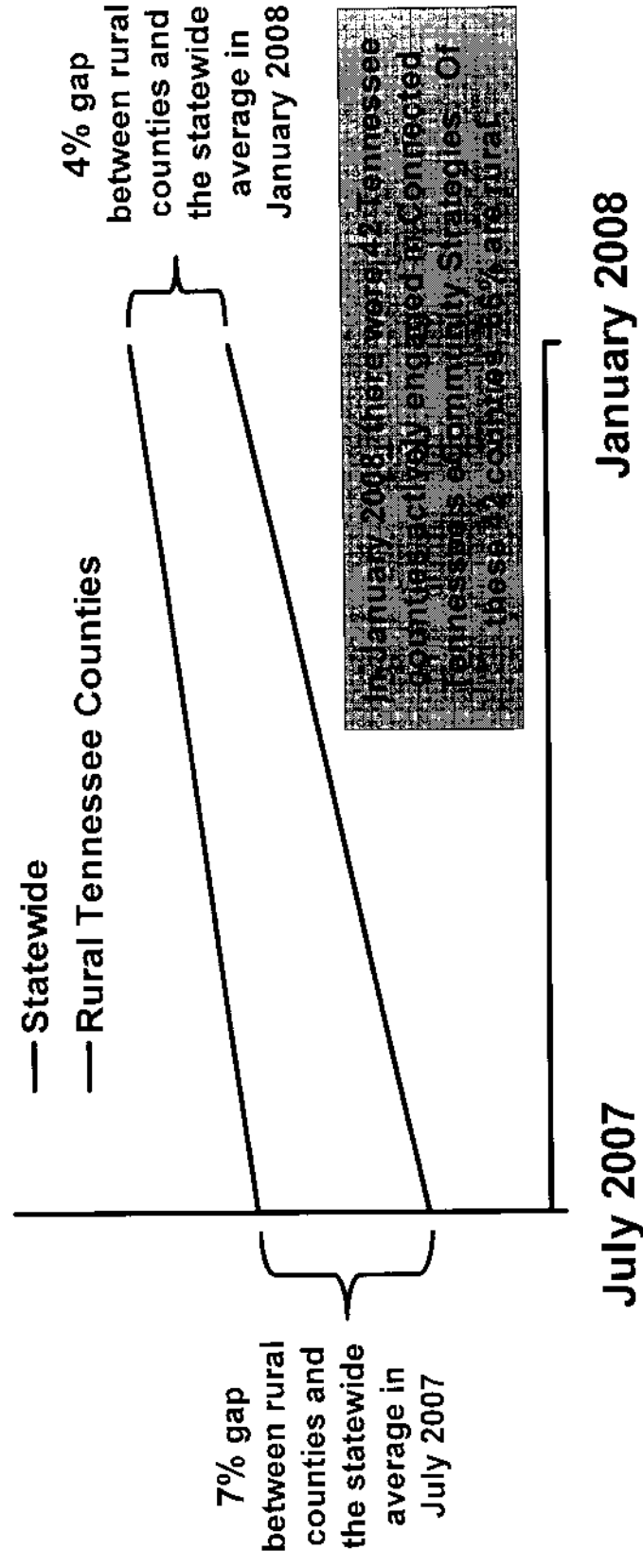
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Trends in Rural Internet Adoption

Percent of Tennessee residents with Internet service at home:



Q: Do you have an Internet connection at home?

(n = 1,106 TN residents)

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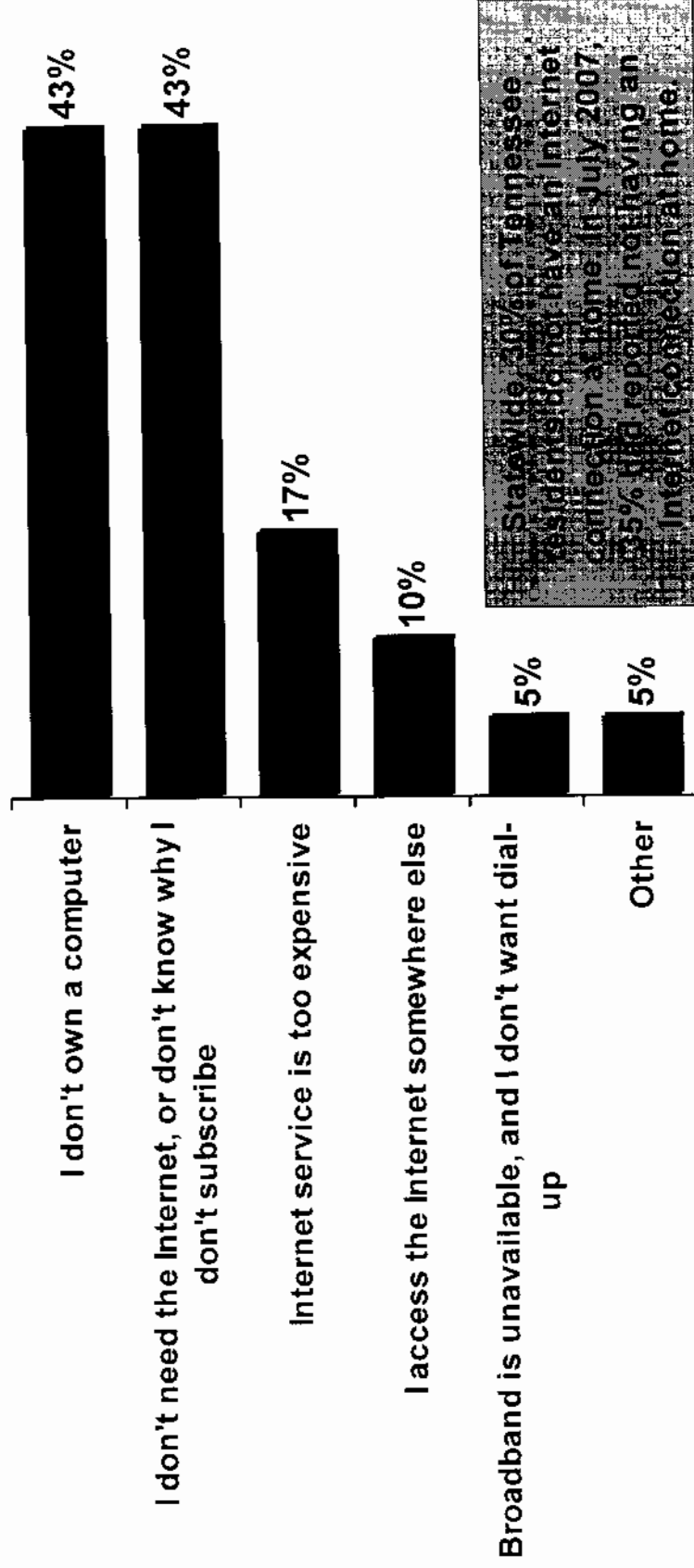


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Barriers to Internet Adoption

Percent of Tennessee residents with no Internet connection at home*:



Q: Why don't you subscribe to the Internet at home?

(n = 333 TN residents with no Internet service in their household)

*Percentages do not add up to 100% because individuals could give multiple responses.

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Broadband Adoption and Usage

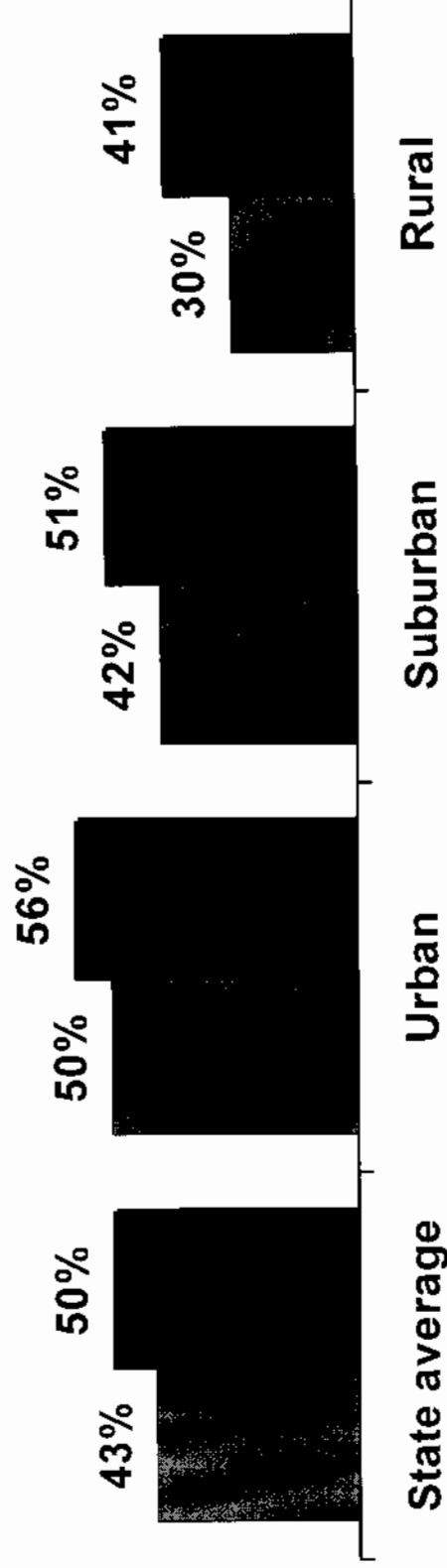


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Trends in Broadband Adoption by Urban-Rural Classification

Percent of Tennessee residents with broadband service at home:

■ July 2007 ■ January 2008



Q: Which of the following describe the type of Internet service you have at home?

(n = 1,106 TN residents)

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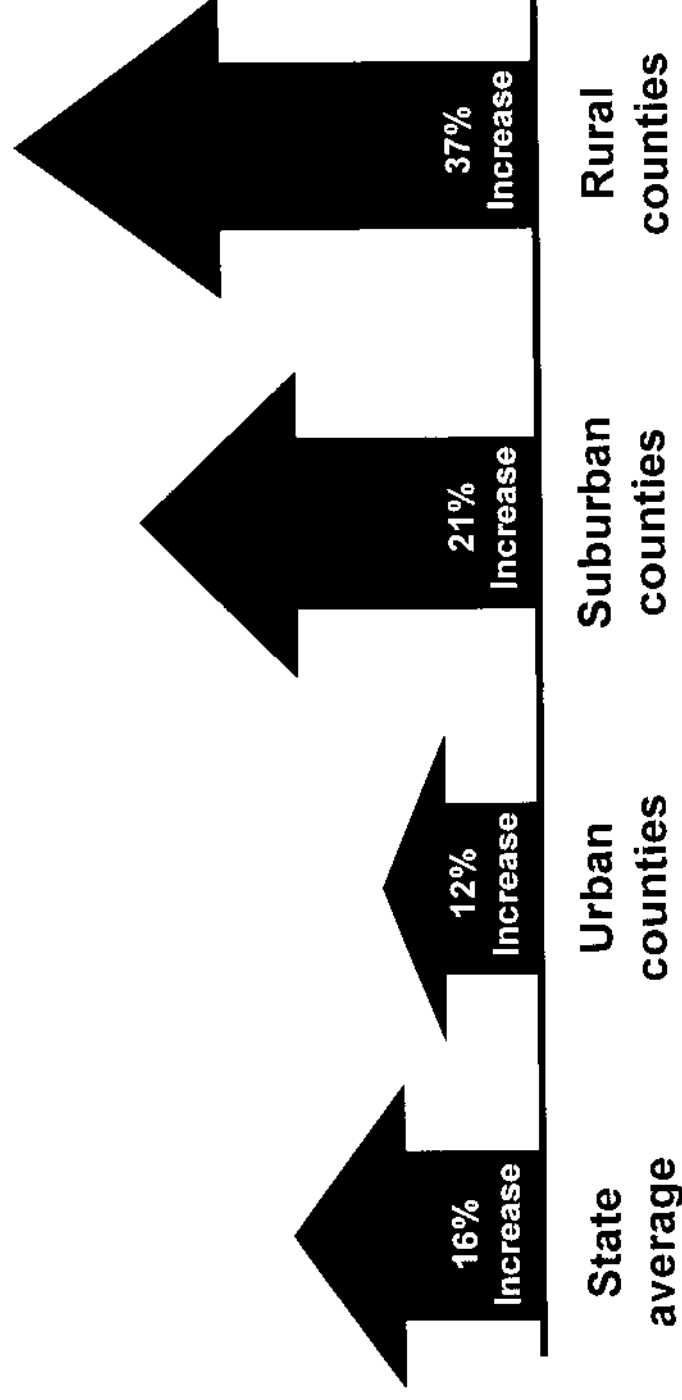
Source: Jan 2008 Connected Tennessee Residential Technology Assessment



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Trends in Broadband Adoption by Urban-Rural Classification

Percent change in broadband adoption from July 2007 to January 2008:



Q: Which of the following describe the type of Internet service you have at home?

(n = 1,106 TN residents)

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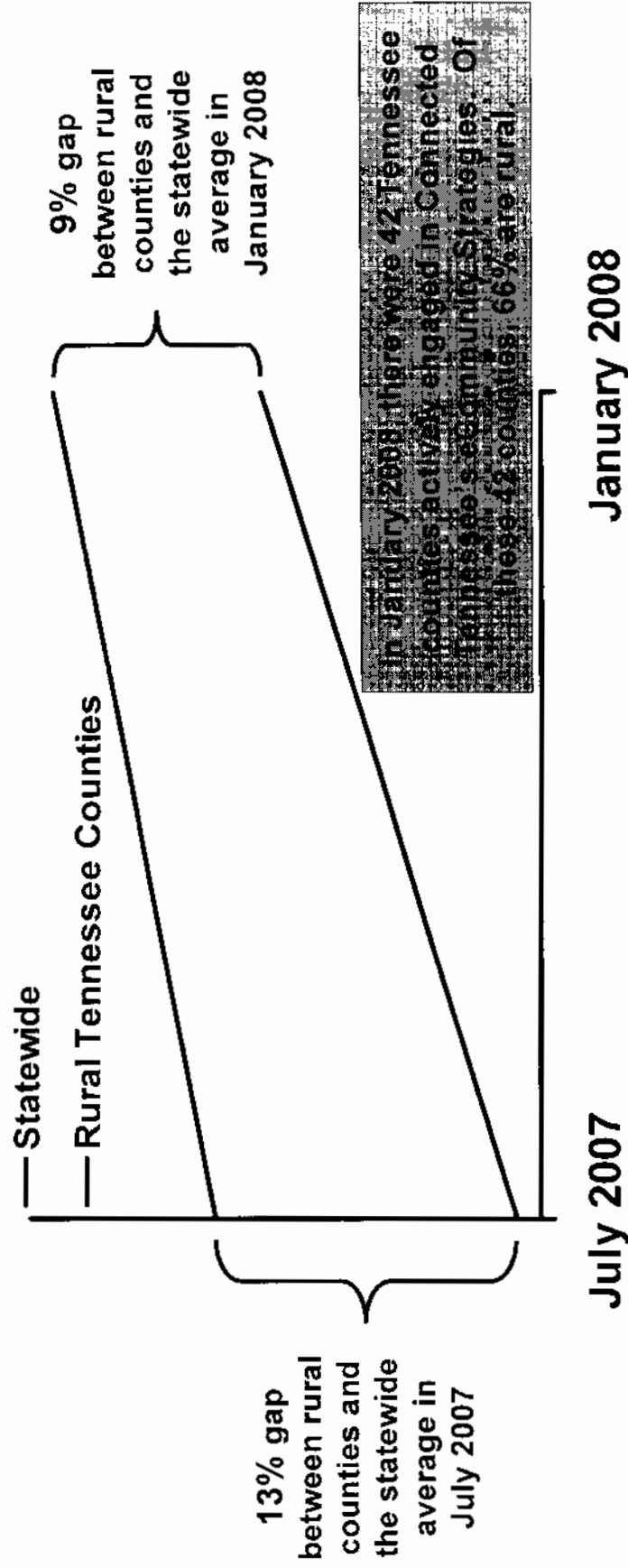
Source: Jan 2008 Connected Tennessee Residential Technology Assessment



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Trends in Rural Broadband Adoption

Percent of Tennessee residents with broadband service at home:



Q: Which of the following describe the type of Internet service you have at home?

(n = 1,106 TN residents)

Source: Jan 2008 Connected Tennessee Residential Technology Assessment

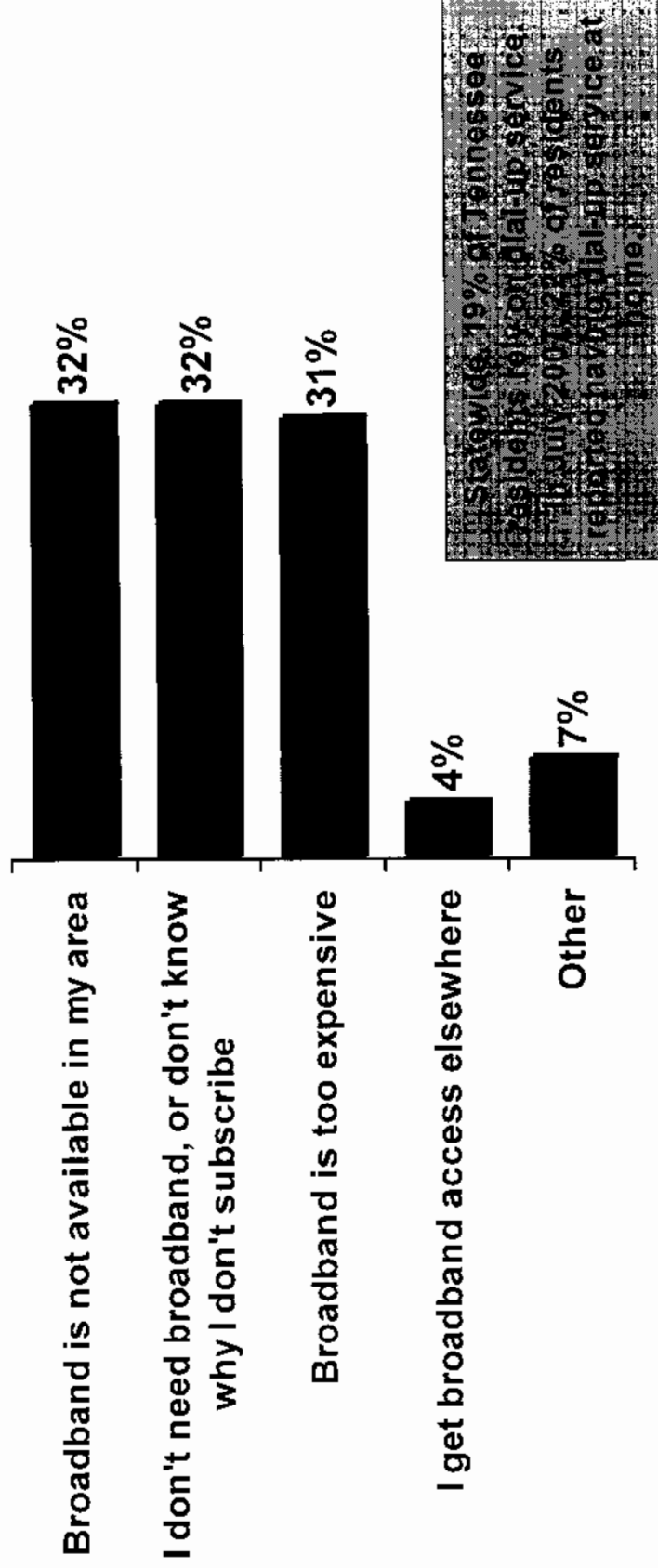
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Barriers to Broadband Adoption Among Dial-Up Users

Percent of Tennessee residents who rely exclusively on dial-up for their home Internet service*:



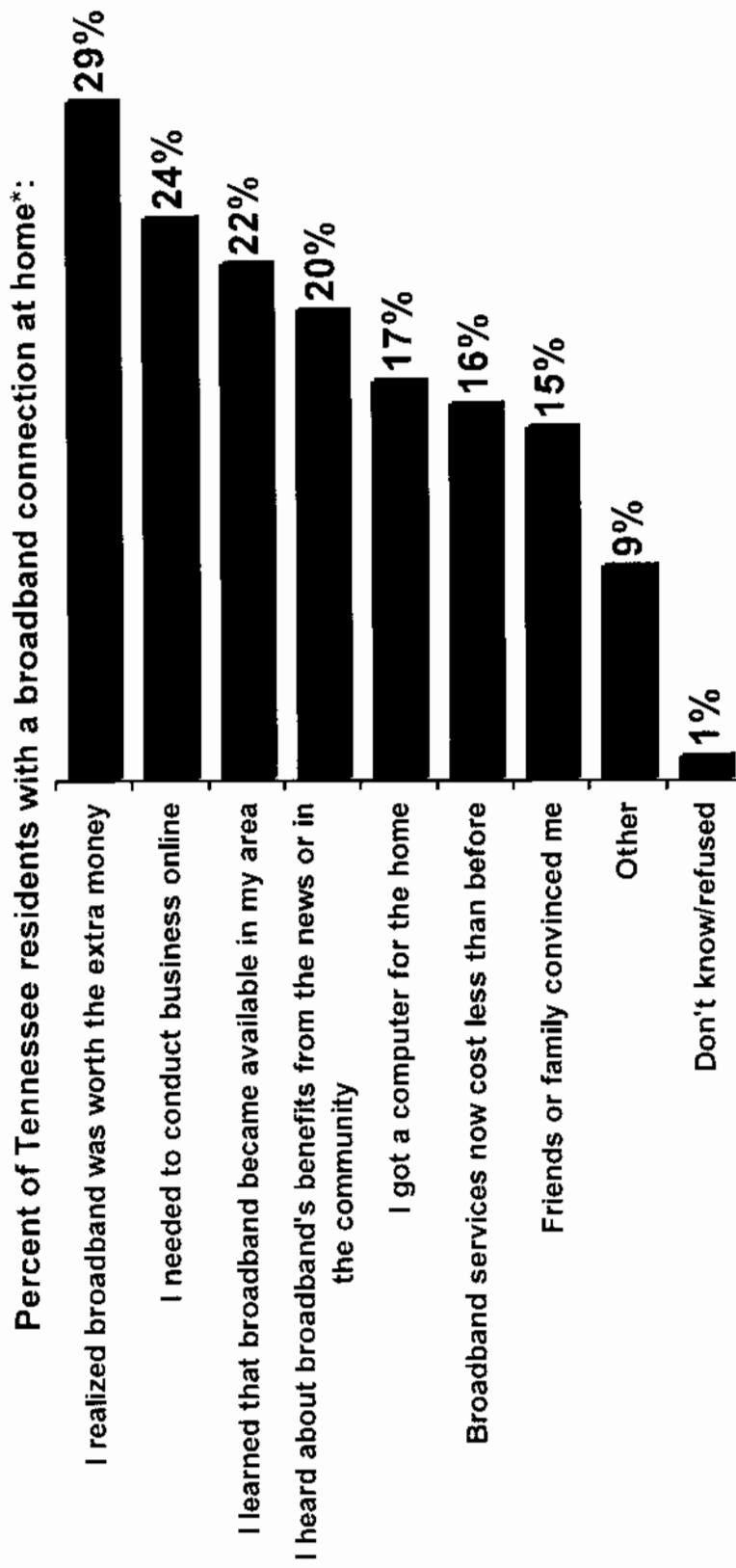
Q: Why don't you subscribe to broadband at home?
(n = 224 TN residents with dial-up service at home)
*Percentages do not add up to 100% because individuals could give multiple responses.
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Why Tennessee Residents Subscribe to Broadband



Q: Which of the following contributed to your decision to subscribe to broadband service?

(n = 549 TN residents with broadband service at home)

*Percentages do not add up to 100% because individuals could give multiple responses.

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Source: Jan 2008 Connected Tennessee Residential Technology Assessment



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Research Methodology



Methodology

- Data were collected by telephone through live computer assisted interviews from a statewide random digit dial (RDD) sample of 1,106 households contacted between January 23 and February 1, 2008.
 - This research was designed to update the state-level benchmarks that were established by the benchmark survey completed in July 2007.
- The questionnaire screened to include only adults age 18 or older with quotas set by gender and age to insure adequate representation of all adults in the state.
- Weights were applied to correct for minor variations and insure that the sample matches the most recent U.S. Census estimates of the state's population by age and gender.
- Sampling margin of error:
 - Statewide, full sample ($n=1,106$): $\pm 2.9\%$ at the 95% level of confidence.
- National comparisons for Internet and broadband adoption rates are taken from surveys conducted by the Pew Internet and American Life Project in August 2007 and December 2007. This time period was used because it most accurately mirrors the dates Connected Tennessee's residential surveys were conducted; however, it should be noted that the national comparison period is slightly shorter than the Tennessee growth period. When the same six month growth in Tennessee is compared to national growth rates over a longer period (using data from similar surveys conducted by Pew in February 2007 and December 2007), Internet and broadband adoption still grew faster in Tennessee than the national average.



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Urban-Rural Classifications Defined

- The U.S. Census Bureau uses an urban-rural classification based on Metropolitan Statistical Areas (MSAs), which are designated by the United States Office of Management and Budget to collect, tabulate and publish federal statistics.
- Metropolitan statistical areas contain a core urban area with a population of 50,000 or more. Each MSA also includes one or more counties that have a high degree of social and economic interaction with the urban core (further information on definitions for MSAs can be found at: www.census.gov/population/www/estimates/00-32997.pdf).
- When classifying urban, suburban and rural counties, we follow the Census Bureau definition whereby counties are categorized as “urban” if they contain the core city of an MSA. “Suburban” counties are MSA counties that do not contain a core city, and “rural” counties include all remaining counties that are not part of an MSA.
- Using these definitions, there are currently 10 Urban, 28 Suburban and 57 Rural counties in Tennessee.



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State Sample Profile

(n=1,106)

Gender:			
Male	48%	Any children under age 18 in household	42%
Female	52%	Average household size (# of persons)	2.9
Age:		Employment Status:	
18 to 34	30%	Employed full-time or part-time	59%
35 to 44	19%	Retired	17%
45 to 54	19%	Homemaker not employed outside home	9%
55 to 64	15%	Student not working for wages	2%
65 or older	17%	Unemployed, disability, other	11%
Mean age (years)	47	No answer/refused	2%
Median age (years)	44	Educational Attainment:	
Race:		Less than high school	12%
White	83%	High school graduate	30%
Black	9%	Some college	25%
Any other	3%	College graduate or higher	30%
Refused	5%	No answer /refused	3%
Of Hispanic origin or descent		Household Income:	
Marital Status:		Under \$25,000	21%
Single, never married	11%	\$25,000 to \$49,999	27%
Married or living in partnership	68%	\$50,000 to \$74,999	15%
Separated or divorced	11%	\$75,000 or higher	22%
Widowed	9%	No answer/ refused	15%
Refused to say	1%	Mean household income (\$000)	\$60.2
		Median household income (\$000)	\$45.5



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Contact Information

Michael Ramage
Executive Director of Connected Tennessee

mramage@connectedtn.org
www.connectedtennessee.org

(615) 242-9508

CAPD EXHIBIT: MDC 4

Development of Average Percentage of Residents Age 65 and Over Representing Embarq
Service Territory

CAPD Exhibit MDC 4

		Number	Percent
Green County	*	9,316	14.8%
Johnson County	*	2,623	15.0%
Carter County		8,515	15.0%
Washington County	**	16,810	14.7%
Unicoi County	*	3,191	18.1%
Sullivan County	*	24,326	15.9%
		64,781	15.4%

* = Census 2000
** = 2006 American Community Survey

CAPD EXHIBIT: MDC 5

EMBARQ™ Yellow Pages

September 2007

Erwin / Unicoi County

Area Code 423

INCLUDES COMPLETE BUSINESS
AND RESIDENTIAL LISTINGS
FROM EMBARQ, XTN AND OTHER
TELECOMMUNICATIONS
COMPANIES FOR:

Erwin
Flag Pond
Unicoi

LOOK INSIDE FOR:

Directory Coverage Map
Government Pages
Information Pages



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INFORMATION

Customer Care

Correspondence Address:
EMBARQ/ACS
P.O. Box 7086
London, KY 40742

Internet Address:
embarq.com

Payment Address:
EMBARQ
P.O. Box 96064
Charlotte, NC 28296-0064

EMBARQ™ Customer Care Call Centers:

Residential/Residential Customers	423-743-4181
Residential Repair	1-800-788-3400
Business Customers (Sales, Service & Repair)	1-800-788-6272
Relay Service	711
For Payment Agent Locations & Credit Cards	423-743-4181

EMBARQ™ Repair - Before calling Repair we recommend you conduct a test of your telephone sets, jacks, and wiring. Repair personnel are available to answer calls 24 hours a day. To report telephone trouble, please call the appropriate number listed above.

Consumer Affairs

Unresolved Problems:

If you still need help after calling one of our EMBARQ™ Customer Care Call Centers, please call:
Special Consumer Representative 1-800-877-3345

Directory Assistance

Dial 1-411 for Local and National Directory Assistance: Telephone numbers for anywhere in the United States can be obtained by dialing 1-411. A maximum of two numbers may be requested on each call. This includes numbers within your area code, outside your area code and toll free numbers. Appropriate charges will apply to each of these calls.

Annoyance Calls

EMBARQ is concerned about obscene and harassing calls and is trying to help stop them. You do not have to talk or listen to such calls - JUST HANG UP. If the calls persist, contact our EMBARQ™ Annoyance Call Center directly. If a threat is made at any time, also contact your local law enforcement agency. Malicious, threatening and abusive calls, including those in which false reports concerning destructive devices (bomb threats) are made, are unlawful. The making of such calls may constitute cause for disconnecting service and possible criminal prosecution and civil action by the person receiving the calls.

EMBARQ™ Annoyance Call Center..... 1-877-451-1980

Automated Account Information

Account Information the Easy Way! EMBARQ has a new computerized voice system that makes getting information about your telephone account faster and more convenient than ever! Now when you call our business office, our computerized voice system works with your touch-tone phone to give you immediate access to current account information. You can check the status of your account at night and on weekends when our EMBARQ™ Customer Care Call Centers are closed. The system is available 24 hours a day, seven days a week.



INFORMATION

Extended Area Service

Extended Area Service provides calls to certain areas by dialing the seven-digit number without a charge. Mandatory ten digit dialing is required for local calls to different area codes and local calls between area codes. Dialing ten-digits for local calls will not incur toll charges.

ERWIN (423)Baileton, Blountville, Bluff City-Piney Flats, Bristol, T.N.,
Butler, Church Hill-Mt. Carmel, Elizabethton, Erwin,
Fall Branch, Greeneville, Hampton, Johnson City,
Jonesborough-Sulphur Springs, Kingsport, Lanesburg,
Midway (Sullivan County), Midway (Washington County),
Mosheim, Mountain City, Roan Mountain, Stone Creek,
Sullivan Gardens

Local Measured Service & Residence Budget Service

EMBARQ offers Local Measured Service (LMS) and Residence Budget Service (RBS) to customers in the Erwin areas. Customers who make a limited number of short calls may be able to save with LMS, which is available to residential and business customers. Under LMS, customers are billed at a basic rate much less than the regular monthly rate and then charged for local calls. The charge per call is determined by the duration calls made, the distance the calls travel, the time of day and day of week the calls were made.

Customers who make a limited number of longer local calls may be able to save with RBS, which is available only to residential customers. RBS customers pay a basic monthly rate that is less than the flat rate for regular private line service. They then pay 10 cents for each local call they make.

Repair of Your Telephone Equipment

LineGuard Maintenance Plan: EMBARQ offers LineGuard, a maintenance plan which covers the testing, repair and replacement of inside wire and jacks, as well as trouble isolation to customer-owned equipment. Trouble isolation includes locating the trouble to customer-owned telephones and other equipment, including modems, fax machines, answering machines or burglar alarm systems. This service is currently available for residential and single-line business customers for a small monthly charge per telephone line. Call your EMBARQ™ Customer Care Call Center for more details.

Emergency Restoration Plan: Whether the threat is from a hurricane, fire, or other disaster, EMBARQ is ready to put its Emergency Restoration Plan into action. During any emergency we ask for your patience. Our first effort will be to provide communication for emergency services. Then, regular service will be restored as quickly as possible.

Customer-Owned Equipment: Each telephone purchased from EMBARQ carries a one-year warranty from the date of purchase. If the product becomes defective while under warranty, EMBARQ will replace the defective equipment with an advanced warranty replacement.

EMBARQ

Yellow Pages™

JUNE 2007

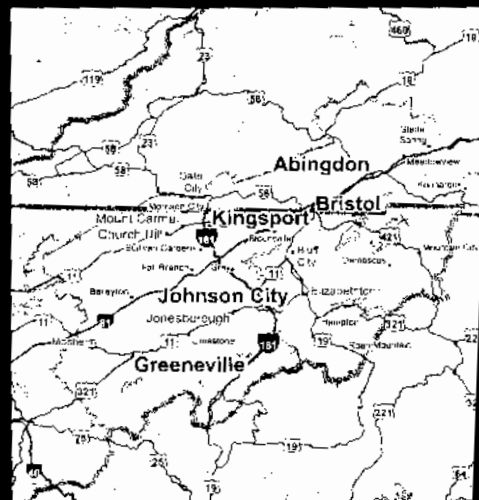


TRI-CITIES / KINGSPORT

AREA CODES 423 & 276

INCLUDES BUSINESS WHITE PAGES AND
YELLOW PAGES LISTINGS FROM EMBARQ, XTN AND
OTHER TELECOMMUNICATIONS COMPANIES FOR

ABINGDON, VA	HAMPTON, TN
BAILEYTON, TN	JOHNSON CITY, TN
BLOUNTVILLE, TN	JONESBOROUGH, TN
BLUFF CITY, TN	KINGSFORT, TN
BRISTOL, TN	KONNAROCK, VA
BRISTOL, VA	LIMESTONE, TN
CHURCH HILL, TN	MEADOWVIEW, VA
DAMASCUS, VA	MORRISON CITY, VA
ELIZABETHTON, TN	MOSHEIM, TN
FALL BRANCH, TN	MOUNT CARMEL, TN
GATE CITY, VA	MOUNTAIN CITY, TN
GLADE SPRING, VA	ROAN MOUNTAIN, TN
GRAY, TN	SULLIVAN GARDENS, TN
GREENEVILLE, TN	



Map shows distribution area of the
Tri-Cities / Kingsport EMBARQ Yellow Pages

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INFORMATION

Customer Care

Correspondence Address:

EMBARQ-ACS
P.O. Box 7086
London, KY 40742

Internet Address:

embarq.com

Payment Address:

EMBARQ
P.O. Box 96064
Charlotte, NC 28296-0064

EMBARQ™ Customer Care Call Centers

Residential/Residencial Customers	423-246-3121
Morrison City, TN.....	276-225-1391
Gate City, VA.....	276-386-9121
Residential Repair	423-246-3123
Business Customers (Sales, Service & Repair)	1-800-786-6272
Relay Service	711
Pay Telephone Service	1-877-904-7774

Repair personnel are available to answer calls 24 hours a day. Before calling Repair we recommend you conduct a test of your telephone sets, jacks, and wiring. EMBARQ does not repair telephone equipment owned by the customer.

Emergency Restoration Plan - Whether the threat is from a hurricane, fire, or other disaster, EMBARQ is ready to put its Emergency Restoration Plan into action. During any emergency, we ask for your patience. Our first effort will be to provide communications to emergency services. Then, all other services will be restored as quickly as possible.

Consumer Affairs

Unresolved Problems - If you still need help after calling one of our EMBARQ™ Customer Care Call Centers, please call:

Special Consumer Representative 1-800-877-3345

Directory Assistance

Dial 1+411 for Local and National Directory Assistance - Telephone numbers for anywhere in the United States can be obtained by dialing 1+411. A maximum of two numbers may be requested on each call. This includes numbers within your area code, outside your area code and toll free numbers. Appropriate charges will apply to each of these calls.

Annoyance Calls

EMBARQ is concerned about obscene and harassing calls and is trying to help stop them. You do not have to talk or listen to such calls - just hang up. If the calls persist, contact our EMBARQ™ Annoyance Call Center directly. If a threat is made at any time, also contact your local law enforcement agency. Malicious, threatening and abusive calls, including those in which false reports concerning destructive devices (bomb threats) are made, are unlawful. The making of such calls may constitute cause for disconnecting service and possible criminal prosecution and civil action by the person receiving the calls.

EMBARQ™ Annoyance Call Center 1-877-451-1980

Automated Account Information

Account Information the Easy Way! EMBARQ has a new computerized voice system that makes getting information about your telephone account faster and more convenient than ever! Now when you call our business office, our computerized voice system works with your touch-tone phone to give you immediate access to current account information. You can check the status of your account at night and on weekends when our Customer Care Call Centers are closed. The system is available 24 hours a day, seven days a week. The information you receive comes directly from our billing system and reflects all current charges and payments. To ensure privacy, safeguards have been built into the system. You must enter your three-digit personal identification number (PIN) which appears after your telephone number in the upper right-hand corner of each page of your bill. To use the computerized system, all you need is a touch-tone telephone. We know you will find the EMBARQ™ voice system convenient and easy to use. Note: The system will be unavailable during account updates.

EMBARQ™ Yellow Pages

February 2008



Tri-Cities/Bristol

Area Codes 423 & 276

Includes Business White Pages and Yellow Pages Listings From
EMBARQ, XTN and Other Telecommunications Companies For:

Abingdon, VA	Fall Branch, TN	Konnarock, VA
Baileyton, TN	Gate City, VA	Limestone, TN
Blountville, TN	Glade Spring, VA	Meadowview, VA
Bluff City, TN	Gray, TN	Morrison City, VA
Bristol, TN	Greeneville, TN	Mosheim, TN
Bristol, VA	Hampton, TN	Mount Carmel, TN
Church Hill, TN	Johnson City, TN	Mountain City, TN
Damascus, VA	Jonesborough, TN	Roan Mountain, TN
Elizabethton, TN	Kingsport, TN	Sullivan Gardens, TN

LOOK INSIDE FOR:
Directory Coverage Map
Information Pages



DexKnows.com™

The Rebirth Of Bristol's Historic Train Station



Published by

DEX®

Your Local Expert

GENERAL INFORMATION

Rights and Responsibilities

Your Local Service Provider is regulated by the Tennessee Regulatory Authority and you can make an informal complaint in writing or by telephone or personal appearance to the Regulatory Authority without the need of legal assistance. Tennessee Regulatory Authority's office is located at:

460 James Robertson Parkway
Nashville, TN 37243
1-800-342-8359
1-888-276-0677 (TTY)
www.state.tn.us/tra

Virginia State Corporation Commission is located at:

Division of Communications
1300 E. Main Street
P.O. Box 1197
Richmond, VA 23218-1197
Toll Free 1-800-552-7945 (Virginia only) or 804-371-9967 (Richmond area)
804-371-9206 TDD

Call Tracing Service (Annoyance Calls)

Annoyance calls which are communications by telephone with intent to intimidate, annoy or alarm another person without legitimate purpose in a manner likely to cause the other person annoyance or harm is punishable by possible criminal prosecution and civil action by the person receiving the call.

Customers who are receiving obscene, harassing, interfering or threatening calls may contact your Local Service Provider to request this service or obtain additional information regarding Call Tracing services. Information regarding traced calls will only be released to Law Enforcement Agencies. Customers wishing for Local Service Providers to release traced call information must file a complaint report with their local Law Enforcement Agency.

Fraud

Tennessee & Virginia law prohibits the fraudulent use of a calling card or telephone billing number, or obtaining or attempting to obtain telephone service with intent to avoid charges. Violators, upon conviction, are subject to imprisonment or a fine or both.

Tennessee Do Not Call Register

Tennessee residential customers can now enroll on the Tennessee Regulatory Authority ("TRA") Do Not Call Register. The Register is a list of the residential telephone subscribers who do not wish to be solicited by telemarketers. To enroll on the Register online, go to the Tennessee Regulatory Authority's web site at www.state.tn.us/tra. You may also enroll by calling toll-free 1-877-872-7030 from your home. Business numbers may not be included on the list. Telemarketers are prohibited from calling your telephone number 30 days after you enroll, unless exempted by law.

Lifeline and Link-Up Programs

Tennessee Universal Service Plan

The state of Tennessee and the federal government have established two programs to make telephone service more affordable. Lifeline Assistance Program is designed to provide qualified low-income residential subscribers a credit on their monthly telephone bill. Link-Up Tennessee helps qualified low-income residential customers initiate telephone service by paying one-half of the service connection charges up to \$30. For more information on either of these programs, call your local telephone business office.

Virginia Universal Service Plan

The Virginia Universal Service Plan (VUSP) is available to Virginia residents receiving Medicaid, food stamps, LIHEAP, Federal Public Housing Assistance (Section 8) or SSI. The VUSP allows for a reduction of service connection charges, not to exceed \$30, when establishing phone service. In addition, eligible customers receive a credit of the Federal Subscriber Line Charge, as well as a credit toward their local telephone service rate. Call your local service provider for additional information.

Tri-Cities/Bristol, TN/VA



INFORMATION

Customer Care

Correspondence Address:

EMBARQ-ACS
P.O. Box 7086
London, KY 40742

Internet Address:

embarq.com

Payment Address:

EMBARQ
P.O. Box 96064
Charlotte, NC 28296-0064

EMBARQ™ Customer Care Call Centers

Residential/Residential Customers	423-968-8131
Residential Repair	423-968-8221
Business Customers (Sales, Service & Repair)	1-800-786-6272
Relay Service	711
Pay Telephone Service	1-877-904-7774
For Credit Card Payments	423-968-8131

Repair personnel are available to answer calls 24 hours a day. Before calling Repair we recommend you conduct a test of your telephone sets, jacks, and wiring. EMBARQ does not repair telephone equipment owned by the customer.

Consumer Affairs

Unresolved Problems - If you still need help after calling one of our EMBARQ™ Customer Care Call Centers, please call:

Special Consumer Representative 1-800-877-3345

Directory Assistance

Dial 1+411 for Local and National Directory Assistance - Telephone numbers for anywhere in the United States can be obtained by dialing 1+411. A maximum of two numbers may be requested on each call. This includes numbers within your area code, outside your area code and toll free numbers. Appropriate charges will apply to each of these calls.

Annoyance Calls

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EMBARQ™ Annoyance Call Center 1-877-451-1980

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Note: The system will be unavailable during account updates.

Tri-Cities/Bristol, TN/VA

EMBARQ

Yellow Pages™

JUNE 2006



GREENEVILLE

AREA CODE 423

INCLUDES BUSINESS WHITE PAGES AND
YELLOW PAGES LISTINGS FROM EMBARQ
AND OTHER TELECOMMUNICATIONS
COMPANIES FOR

BAILEYTON

BULLS GAP

GREENEVILLE

LIMESTONE

MOSHE

TRI-CITIES AREA BUSINESS LISTINGS

TUSCULUM

What's Inside For You

- Bright Idea Pages
- Directory Coverage Map
- Money-Saving Coupons
- Restaurant Menu Guide

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P.O. Box 7086
London, KY 40742

Internet Address:

embarq.com

Payment Address:

EMBARQ
P.O. Box 96064
Charlotte, NC 28296-0064

EMBARQ™ Customer Care Call Centers

Residential/Residential Customers	423-638-3101
Residential Repair	423-639-6711
Business Customers (Sales, Service & Repair)	1-800-786-6272
Relay Service	711
Pay Telephone Service	1-877-904-7774
For Credit Card Payments	423-638-3101

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Greenville, TN